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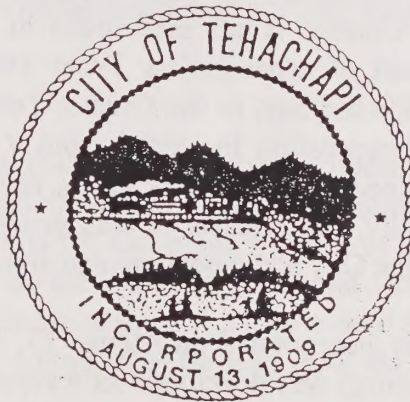
H A C H A P I

GENERAL PLAN UPDATE

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UNIVERSITY OF CALIFORNIA



City of
TEHACHAPI
Planning Department

[1999?]

115 SOUTH ROBINSON STREET
TEHACHAPI, CALIFORNIA 93561

INTRODUCTION

I. PLANNING FOR THE FUTURE

It is the purpose of the Tehachapi General Plan Update to give direction to the long-range development of the City. The Plan should serve as a stimulus and guide to a multitude of public and private decisions, which will be made over the next decade.

As its name suggests, the General Plan is general in nature. It is also long-range. It sets forth goals, policies and directions. It cannot prescribe specific programs and funding mechanisms to achieve those goals; neither can it dictate the exact zoning, which will control the use and development of each parcel of land in the City.

The areas known as the Tehachapi and Cummings Valley have been one of the fastest growing areas within the County. It has seen much of its rich endowment of open space dissipated under the impact of urbanization. From 1980 to 1999, the major population growth was centered outside the city, in the Greater Tehachapi Valley Region. In the same period, however, the city population increased from 4,095 to 6,582. Obviously, the new growth has not been contained within the city limits. However, while the population growth has not centered in the City, the impacts of this growth have and will continue to have effects upon the future of the City some positive and some negative.

The City of Tehachapi was incorporated on August 13, 1909, with a population of 520. Old Town (formerly Williamsburg) was developed as a supply center for the local ranchers and travelers to the San Joaquin Valley and the Kern River gold fields. The arrival of a railroad terminal nearby started a town west of present day Tehachapi. Even though these urban towns existed, agriculture ranked as the foremost activity throughout the Greater Tehachapi Area.

The Tehachapi Planning Area comprises an area in the eastern/central section of Kern County, approximately 36 miles east of Bakersfield. The City is bisected by State Route 58.

The Tehachapi General Plan covers the Tehachapi Sphere of Influence, an area of approximately 23 square miles, being primarily the Tehachapi Valley, from Golden Hills to the Calaveras Cement Plant.

The General Plan covers not only the present City limits but also takes into account areas outside that bear relationship to its overall planning. In addition, areas that might be annexed are shown on the City's General Plan Map. It is better that a city extends its plan now in order to properly plan for infrastructure and public facility needs.

A. The Role and Purpose of the General Plan

The General Plan is the foundational policy document of the City of Tehachapi. It defines the framework by which the City's physical, economic, and human resources are to be managed and utilized over time. Decisions by the City in regard to the use of its land, design and character of buildings and open spaces, conservation of existing and provision of new housing, provision of supporting infrastructure and public and human services, protection of environmental resources are guided by the Plan. Through the Plan, the City can inform various groups of its goals, policies, and development standards, thereby communicating what is expected of the private sector to meet its objectives.

The Tehachapi General Plan is, in effect, the constitution for development within the City. This General Plan Update will serve as a blueprint for long-range physical planning of the City. The element contains stated community goals and policies designed to shape the long-term development of the City, as well as protect its environmental, social, cultural and economic resources.

B. State Requirements

The Tehachapi General Plan is being revised under the State Legislative mandate contained in Sections 65300/65403 of the Government Code, and the General Plan Guidelines promulgated by the Governor's Office of Planning and Research in 1987. The need for revision of the Tehachapi General Plan, however, goes beyond the Legislative mandate. It is based upon the City's need for a current, manageable set of development policies and objectives flowing from the experiences of the past.

California State law (Government Code Section 65300) requires that each city prepare and adopt a comprehensive, long-term general plan for its development. It must contain seven elements including land use, circulation, housing, conservation, open space, noise, and safety. In addition, it permits the inclusion of other elements which address specific needs and objectives of the City.

The content of each element is prescribed by the State of California General Plan Guidelines, published by the Office of Planning and Research (OPR). Specific requirements for the Housing Element are defined by the State Department of Housing and Community Development (HCD), Title 25, and the Noise Element is defined by the Office of Noise Control, California Department of Health. The (~ contents of optional elements are to be determined by a city based on its needs and objectives. In the case of Tehachapi, a Public Facilities Element has been updated as an optional element.

California State law requires that the day-to-day decisions of a city should follow logically from and be consistent with the General Plan. Government Code Sections 65860, 66473.5, and 66474 require that zoning ordinances and subdivision and parcel map approvals be consistent with the General Plan. Planning case law has

placed the General Plan atop the hierarchy of local government law regulating land use. Consequently, consistency between the General Plan and all other land use plans, policies and programs is necessary. Zoning ordinances, specific plans, redevelopment plans and individual project plan proposals must be consistent with the goals, policies and standards contained in the General Plan. In addition, all capital improvements and public parks projects must be consistent with the General Plan.

C. Organization of the General Plan

The City of Tehachapi General Plan Update contains each of the seven elements required by State law and one optional element (Public Facilities). Seismic Safety formerly a separate State-mandated element, has been included within the Safety Element.

As defined by the State General Plan Guidelines, the mandated and permissive elements often overlap in subject matter and policy. To avoid potential redundancy and confusion, and provide a cohesive and consistent approach to issues, the eight elements are contained within three sections, which organize related elements, by subject matter and purpose. For example, the Public Health and Safety section contains the State-mandated Safety and Noise Elements. These elements are combined within a section because of their intimate relation to the health and safety of Tehachapi's citizens.

The eight General Plan Elements and the Land Use Allocation Map state the community's goals and policies for the long-term development of the City. Each element is comprised of three sections. The first section serves as an overview of existing conditions. The second section provides a brief analysis of issue areas and respective goals and policies. Finally, implementation measures intended to address issue areas are presented.

For each topic/element in this document presents an overview of pertinent conditions as they existed in 1999 and the complete goals, objectives, policies, and programs.

The following indicates the definitions of goals, objectives, policies and programs contained in this General Plan Update.

Goals

The ultimate purpose of an effort stated in a way that is general in nature and immeasurable.

Objectives

A measurable goal

Policies

A specific statement guiding action and implying clear commitment.

Implementation Programs

Actions, procedures, or techniques that carry out the general plan policy through implementing a standard (a specific, often quantified guideline defining the relationship between two or more variables).

The Environmental Impact Report (EIR) describes the environmental impacts anticipated to result from the implementation of the plan. The EIR will cross-reference sections of the elements that serve to analyze the environmental impacts of plan policy. The EIR prepared in conjunction with the General Plan update is a program EIR. Program EIRs are intended to cover a sequence of actions of implementation steps and not necessarily specific project impacts. As such supplemental environmental analysis may be necessary and appropriate on a project by project basis.

D. Relationship Among General Plan Elements

As a comprehensive strategy for the management of a city's diverse physical, economic, and social resources, there is a high level of interrelationship among the topics and elements of the General Plan. The Land Use Element provides for the types, density/intensity, and distribution of development. The Open Space Element provides for the type and design of open spaces which are the linkages between various areas of the City. The Housing Element provides for the manner in which existing housing will be conserved and new housing will be produced, in context of the areas permitted for development by the Land Use Element. The Circulation and Public Facilities Element identify the types of and specify the means by which public infrastructure will be provided to support the uses accommodated by the Land Use Element, in addition to the range of services needed to support the City's residents, businesses, and visitors. The Conservation Element defines policy for the protection of significant resources in context of new land use development. The Safety and Noise Elements provide for the protection of humans and uses from the adverse effects of natural and man caused hazards.

II. GENERAL PLAN UPDATE EXISTING GOALS

The following goals and policies were developed to aid the City of Tehachapi's existing General Plan in meeting the needs of Tehachapi in regulating long-term development within the City's sphere of influence.

1. Guide the City in planning its future, optimize public service costs, improve management of the community, preserve community character and enhance the environmental quality.

2. Manage development to optimize capital improvements expenditures, improve infrastructure efficiency, encourage planned land uses, support community preferred lifestyles, maintain land and enhance property values.
3. Expand the range and supply of housing to support families and improve housing quality.
4. Separate incompatible land uses for functional productivity, reduction of nuisance and improvement of health and safety, and combine compatible land uses for efficiency and convenience.
5. Improve and enhance the older portions of the City for more economical use of services, protection of the housing supply, prevention and mitigation of blight through the information and implementation of an RDA and maintenance of property and tax values.
6. Preserve and encourage residential neighborhoods to strengthen communities, provide effective service distributions, reduce transportation demands and protect the family.
7. Improve and expand infrastructure to accommodate areas that represent a logical extension of urbanization and growth, increase services and reduce service costs.
8. Develop circulation routes to promote efficient transportation, reduce hazards, pollution and to conserve energy. Develop supplementary circulation to service secondary needs including bicycle, pedestrian and rural atmosphere boulevards.
9. Maintain and expand aesthetics and open space of the area for health and beauty, recreational opportunities, and the natural environment of the Tehachapi Valley.
10. Expand quality employment opportunities to improve and enhance incomes; promote, stabilize and develop the community; provide economic security for the community and insure the continued means to maintain the lifestyle of new and existing residents.

III. GENERAL PLAN UPDATE EXISTING POLICIES

1. It is the intent of the General Plan that the Zoning not be changed until required by the orderly phased growth of the City.
2. Funding of additional services or infrastructure, necessitated by population increases shall be provided as a part of each new proposed development.

3. Conformance with the General Plan shall be a major consideration in the action on a specific development proposal.
4. Residential densities will be evaluated for the total site in order to encourage the use of innovative techniques, which preserve the environment and increase the communities' livability.
5. Major energy development projects, such as wind farms should be sited so as not to detract from the rural view scapes of the City.
6. Annexations shall be reviewed on a case-by-case basis so as to determine the suitability of the proposed land use designation and proposed rezoning in relationship to the existing incorporated City, established pattern of development and potential future annexations.
7. Development projects within the Kern County area that are within the City of Tehachapi's designated sphere of influence area should be evaluated as to consistency with the City's General Plan. As such the City of Tehachapi will work proactively with Kern County in this regard.
8. Planning activities of the City and County should be coordinated for cooperative action that promotes sound and orderly growth of areas that affect the respective jurisdictions and to maintain a clear line of demarcation between town and county.

IV. SUBSIDIARY EXISTING GOALS AND POLICIES

Many issues that need to be considered as part of a General Plan, do not neatly fit into a specific land use category. Rather, they span several or all land uses and are critical to all of them. Discussing these issues in their overall relationship is the basis of planning and formulating responses to the future. These various issues, in the sections below, often relate to one another. Environmental Resources discusses the effect land use decisions have on such natural features as hillsides, prime agricultural lands and mineral resources. Historic Resources is the preservation of historic sites while Design Resources speaks to the establishment of historic design consistency. This relationship helps establish a cohesive plan that addresses not only specific projects but overall future development.

These subsidiary goals and policies need to be used in conjunction with the specific land use category when evaluating projects. Associated General Plan elements such as Safety, Conservation, Open Space and Noise should also be consulted for overall policy evaluation.

A. Environmental Resources

The Tehachapi Valley has abundant natural resources, scenic areas such as hillsides, good air quality, water resources, farmlands, native vegetation, wildlife, mineral and historical resources. The General Plan Update contains policies to protect these areas, not only because they have economic value but, most importantly, are necessary to the quality of life in the Tehachapi Valley.

Development, if unplanned, will overburden the natural capacity of the Valley's water supply. Securing enough water at reasonable rates is a challenge that is of prime importance to the City's future.

Air pollution is a concern to the area. Even in this area, the atmosphere is becoming polluted. Albeit, mostly from the central valley, but more and more from the effects of increased urbanization in the valley. While many solutions to air pollution require regional approaches, local land use decisions, which minimize dependence on vehicular traffic and pollutant sources, are needed to maintain clean air in the valley.

The Tehachapi area contains many unique resources, both natural and constructed. Standards need to be established to protect the areas assets of hillsides, prime agricultural lands, sensitive wildlife habitats and historic areas and archeological resources.

Future land use decisions in the valley must protect the sensitive natural environment. Development needs to be directed so that the capacities of the water basin are not exceeded. Development needs to be designed and sited in a way that is compatible with the natural qualities of the land. Economically viable agricultural lands and mineral resources need to be protected from premature development.

B. Environmental Resource Goals

1. Protect and manage natural resources such as wildlife, vegetation, soils, air, water, and minerals to retain their functional and ecological values.
2. Protect areas of natural diversity and beauty such as hillsides, meadows and streams.
3. Protect future development from hazards associated with adverse soil conditions, excessive slopes, flooding and seismic conditions.

C. Environmental Resource Objectives

1. Development activity shall not degrade the natural beauty of the area and reasonable steps shall be taken to mitigate adverse effects such as preserving existing trees, topography, landscape, and rock outcroppings.
2. Development on hillsides shall be designed to minimize visual impacts, grading and potential erosion hazards.
3. Regional programs to improve air quality shall be supported.
4. Air quality implications of new development shall be considered in the approval of major development.

5. Future development and annexations to the City shall provide water and wastewater resources sufficient for the proposed land use of the property.
6. The City shall support the water resource conservation efforts of the Tehachapi-Cummings County Water District.
8. Projects shall not damage stream and gully areas.
9. Flood control modifications, which are required, shall use designs, which avoid alteration of natural creek patterns and adjacent environs.
10. Projects should preserve drainage areas and provide multiple uses for such purposes as parks, open space, trails and flood easements.
11. Areas of special wildlife or ecologic nature shall receive attention for open space preservation.
12. Projects shall minimize erosion and runoff hazards through proper design and grading regulations.
13. Areas of mineral resources shall be protected from premature urbanization that would limit their uses.
14. Septic disposals may be permitted where dwelling unit density will remain relatively low and use will not present adverse environmental effects.

D. Historic Resources

The term Historic Resources in this plan is used to denote resources which, if they are to survive for future generations, must be protected by the present generation. The Historic Resources include natural, historic and cultural entities. These Historic Resources are:

- Paleontological sites,
- Archaeological sites,
- Cultural sites and structures, and
- Historical sites and structures

The history of the Tehachapi Valley and the City is rich. It has been chronicled in numerous books and magazine articles. The people of the area are proud of their past and have endeavored to preserve it. Earthquakes, floods and urbanization have all contributed to irreplaceable losses of sites and structures. However, much remains that provides a solid background of the community's history. Many sites of today

may be tomorrow's "historic buildings". The old County Library and the old Hotel Building on South Curry Street are excellent examples of WPA Buildings or "30's Baroque". Today, these are just a few examples of unique architectural style in the area. The Tehachapi area has an active program through the Tehachapi Heritage League in preserving the rich historic heritage of the valley.

The preservation of historically significant sites makes major cultural, aesthetic and economic contributions to Tehachapi. The primary objective is not to make museums and parks out of old buildings and sites but to give them an active role in present day society through adaptive reuse while keeping their essential characteristics intact.

Archaeology and paleontology provide another essential link with the people and events of the past. In the Tehachapi area, archaeological finds remind us that before the settlers, the land was occupied by various Amerindian tribes. There are Kawaiisu Indian village sites throughout the Valley, usually with nearby "middens" or other remains. These sites tell much about earlier residents. There are also burial and other sacred sites, which are still important to present day Native Americans.

Archaeological sites have been found throughout the area, often with pictographs. The greatest abundance is found in areas where food, shelter and water were available, often near oak groves and caves. Many of the locations most prized by the Indians are in areas where future development has been proposed.

The Greater Tehachapi Valley has paleontological sites, which have proved to be of interest. Evidence of prehistoric flora and fauna has been found embedded in the various rock formations of the area.

The presence of archaeological or paleontological sites in an area does not necessarily need to restrict development. There are some sites that are important enough that they should not be disturbed. Those sites may be best set aside as reserves. Most sites provide the ability to design a project so it does not intrude upon the integrity of the site. In more extreme cases, a site may best be excavated by trained and responsible authorities. Conservation of an historic or archaeological site into a project phase would not only preserve the site but enhance the overall value of the project.

Goals

Preserve and enhance the quality of historic sites for present and future generations.

Objectives

Architectural, historical and cultural resources should be identified and protected from loss or destruction.

Projects in areas found to have archaeological, paleontological, and natural resources should be conditioned and designed to protect the resources.

Excavation, exploration and documentation of archaeological and paleontologic sites shall be conducted only by recognized authorities by applicable State laws.

Projects should endeavor to incorporate local history as a basis for design criteria and avoid contrived architectural "themes" such as western and/or early California concepts.

Efforts should be made to preserve and encourage the rehabilitation of older buildings and areas to maintain the quality and character of the City.

V. LAND USE ELEMENT

The General Plan Land Use Element will discuss the land use categories that are designated on the General Plan Maps.

There are five (5) major land use categories: industrial, commercial, residential, open space and public facilities. Each of the following sections begins with a brief discussion of the category, followed by the existing overall goals and objectives for the major land use being examined. The specific land use designations are discussed as subsections. The specific land use is described, its characteristics noted and examples shown.

The Land Use Element, while an overall reliable guide to development, needs to be used in conjunction with the other elements of the General Plan Update. Exceptions and limits may be applicable due to constraints imposed by natural features, such as topography.

A. Industrial Uses

In order to provide an opportunity for local employment and an improved tax base, suitable areas for industrial use have been designated. The City of Tehachapi has existing industrial uses that serve the local area such as concrete batch plants, lumberyards and gas distribution facilities. There are also industries within the City involved in manufacturing products for distribution outside of the local economy.

The trend of small- and medium-sized light industrial firms relocating from large metropolitan areas to smaller communities may be indicative of future industrial development for the City of Tehachapi. This trend is precipitated by a desire for an increase in "quality of life" and changes in technology that allows businesses to succeed outside of the urban centers.

The area between the Union Pacific Railroad lines and State Highway 58 is well suited for industry as it is adjacent to both highway and rail transportation and is presently zoned industrial. But these same qualities also make these areas unsuitable for any new or expanded residential use due to high noise levels from existing or potential uses and impacts due to air quality, lighting and other factors relative to industrial operations.

Goal

Provide for adequate industrial development for a stable local economy that does not detract from the Tehachapi environment.

Objective

Provide for a quality industrial development through the use of performance standards.

B. Commercial Uses

Various commercial areas are designated to strengthen the local economy, tax base and enhance the quality of life for the community. This type of use is essential to the well being of a community by providing goods, services and employment.

The central city area, with its pleasing design, wide shady streets and attractive homes, is oriented best to providing specialty and service type uses. These uses, ranging from offices, owner-operated stores, boutiques, service uses and specialty stores, are better suited to the established central city area. By contrast, the high customer volume, large turnover of operations characterizing modern shopping centers, will locate at major thoroughfares.

Commercial land uses will require proper planning and distribution to capture appropriate market segments as the planning area develops. Properly planned residential development within general commercial areas will encourage viable use of lands that have not yet been developed commercially.

Some commercial uses that are more service oriented or cater to a specialty market may be compatible with residential uses. Neighborhood commercial areas provide needed local services and may offer a transition area between differing uses. Proper siting, design and landscaping are essential in these areas to protect both the *residents and* commercial uses.

Areas that are not well suited for continued residential use or are evolving to a higher intensity of commercial office use, may serve as a compatible transitional use.

Like the neighborhood commercial use, it calls for good planning incorporating existing residential uses.

The commercial land use designations for the Tehachapi General Plan Update are as follows:

A. Neighborhood Commercial

The Neighborhood Commercial designation applies to businesses, which have a retailing function that serves the needs of local neighborhood

residents. Businesses are generally smaller in floor area than those located in other categories of commercial land use. Typical businesses include retail convenience stores, cleaners, donut shops, eating and drinking establishments, food stores, etc.

B. Community Commercial

Businesses in this category generally have a retailing function that serves the needs of Tehachapi residents. The Community Commercial designations are located in the planning area to meet the commercial needs of specific residential areas. Typical businesses might include shopping centers, typically 8.1 to 20 acres, with a variety of convenience and service establishments, restaurants and related uses.

C. General Commercial

A significant portion of land devoted to commercial enterprise is designated as General Commercial. This category permits a wide range of retailing, wholesaling, and service activities and represents an important source of sales tax revenue for the City. Specific uses include auto servicing and repair, furniture and appliance sales, and related service establishments.

Goal

Provide long-term, high standard commercial growth of a stable and permanent nature that maintains and enhances the quality and well being of the community.

Objective

Provide for commercial development alternatives through the use of quality performance standards.

D. Residential Uses

There are six residential land use designations in the General Plan. They range in density from concentrated urban development to rural densities suitable for ranchettes/estate living. An effort has been made to accommodate a variety of housing types and styles in conventional and cluster type subdivisions.

More than any other land use category, residential uses affect the character and quality of the City. It is more than an immediate impact as decisions made will leave an indelible impression for decades to come.

The City has large areas of existing housing that needs to be maintained and protected. The housing within the original town site provides quality housing and links with the past. Newer tracts are in excellent condition and provide the majority of the housing for the City residents.

Future development faces problems that will have to be dealt with in order to provide needed housing. The effects of inflation, interest rates and government funding restrictions, together with water and wastewater limitations, have created unanticipated constraints that will demand innovations and flexible solutions by both public and private sectors.

By establishing a wide variety of residential uses with provisions for new ideas of development, the General Plan Update will aid in this effort. These efforts, while enabling greater freedom in housing styles, types and ownership, need to protect existing and future residents.

The following residential designations will be used in the General Plan Update:

E. High Density Residential

The High Density Residential land uses are concentrated urban type dwelling unit that provide a variety of housing types for all economic segments of the community. They are usually attached dwellings in either one- or two-story units and renter occupied. Examples include apartment houses, townhouses, four-plexes and five-plexes, etc. A maximum of 18 dwelling units per gross acre shall be allowed. High-density residential development shall be located close to commercial development, quasi-public development and major arterial streets.

F. Medium Density Residential

Medium Density Residential land uses allow for a wide variety of residences at a higher density than neighborhood development. They are generally for multiple family use in existing and new areas for attached or detached configurations and styles. Examples include townhouses, four-plexes, condominiums, single-family homes, patio homes, mobile home parks, etc. A maximum of 12 dwelling units per gross acre shall be allowed.

G. Neighborhood Development

Neighborhood Development is a residential land use established to provide densities in a neighborhood setting, offering innovative design opportunities. They are detached single-family dwellings or two story configurations, usually owner occupied but with provisions for flexible design in newer areas. Examples include tract homes, patio houses, zero lot line and townhouse condominiums. A maximum of 4.4 dwelling units per gross acre shall be allowed.

H. Estate Residential

Estate Residential is a residential category that offers large lots and low residential density that often allows limited equestrian uses and may develop in a cluster arrangement to share common open space. Examples include ranchettes, single

family housing, townhouses and condominiums. The maximum density shall not exceed: (a) 2 dwelling units per gross acre, (b) 1 dwelling unit per gross acre, and (c) 1 dwelling unit per each 2 1/2 gross acres. The minimum lot size shall be: (a) 1/2 acre gross, (b) 1 acre gross, and (c) 2 1/2 acres gross.

Goal

Provide for quality residential development that will provide both creative and economical dwellings for all segments of the population, yet protect and enlarge the overall community.

Objective

Provide for creative opportunities that will encourage development of economic housing and protect the environmental quality through the use of performance standards.

I. General Resource Uses

While there are little resource uses within the City of Tehachapi, their careful management is essential to the future well being of the City. The City by its very nature urbanizes yet, to retain character, it needs to keep the open space characteristics around it to maintain its attractive and rural qualities.

The Agricultural Land Use designation is involved primarily with active agricultural uses, dependent mainly on irrigation for production.

The Natural Resources Land Use designation is a combination of dry land grazing activities, limited natural resources and mineral resource production.

As the City grows and develops, it is almost a certainty that much of these lands will eventually urbanize. At this time, however, sufficient urban lands are available, thus enabling the preservation of these lands. Much of these areas, especially within the natural resource category, are more difficult to develop due to slopes, erosion and conflicting land uses. The future development of these areas needs to be based on a careful and in-depth evaluation of the limits of these lands.

J. Agricultural

Agricultural Land Use includes areas of agricultural production whose uses depend on active farming with necessary ancillary uses. These include consolidated areas of prime and unique agriculture soils, aqueduct water or sufficient adjudicated well water, active agricultural production, within an agricultural preserve. Examples are turf farms, orchards, row crops, grazing lands and domestic animal production. The minimum parcel size shall be 10 gross acres with no more than one dwelling unit per parcel.

K. Natural Resource

Natural Resource Land Use designations are areas of mixed natural resources such as rangeland, mineral deposits or aesthetic open spaces that often serve as watersheds, wildlife habitats and areas of potential resource extraction. They are characterized by large uninhabited areas usually with less than prime soils with numerous physical constraints to development.

The minimum parcel size shall be 20 gross acres with no more than one (1) dwelling unit per parcel.

Goal

Maintain sufficient resource areas for continued open space qualities, agricultural production and mineral extraction without detriment to existing or potential urbanization.

Objective

To the extent feasible, provide stable areas for long-term agricultural and mineral extraction that will not be subject to premature urban development.

L. Public Facilities Uses

While proportionally smaller than any other land use classification, public facilities have some of the most important impacts on a community. Lands are needed for the provision of public services such as water, sewer treatment and other governmental uses, such as airports. Educational facilities are essential to the well being and continued vitality of a community. Parks and recreational lands are needed to provide an aesthetic and healthful city. Each of these uses may be treated as a distinct element of a General Plan.

The effort in this case is to identify those lands that distinguish themselves due to unique factors attributable to them. Furthermore, policies and criteria have been developed for their continued and compatible uses.

Public Facilities Land Uses include:

(a) education and ancillary facilities for all levels of public instruction uses, (b) general government offices, facilities and equipment yards, city government offices, police and fire stations, airports, etc. and (c) public recreational areas such as playgrounds, ball fields, parks, picnic areas, living and other outdoor recreational facilities, etc.

These land uses are sponsored, owned and operated by public entities such as school or park districts, State or local governments and available to all segments of the community.

Goal

Provide areas for public facilities that are central, economical and compatible with surrounding areas.

Objective

Provide public facilities based on community needs and consistent with the General Plan's goals and policies.

VI. CIRCULATION ELEMENT

The State requires, and good planning necessitates, a comprehensive approach to the Circulation Element. While streets and highways are the primary subject, such topics as parking facilities, mass transit, railroads and bicycles are discussed.

Downtown Tehachapi is easily accessible to its market area on State Route 202, Tehachapi Boulevard and Highway 58. This access has proven valuable in attracting customers from the recreational subdivisions, and the traveling public to the downtown retail establishments. New commercial areas are also developing at Tucker Road and Highway 202.

Downtown Tehachapi needs additional adequate parking to serve the retail businesses. The downtown merchants have been successful in providing rear and side entrances from the mall parking facilities located south of Tehachapi Boulevard between Green and Robinson Street.

Although new parking has been provided, the majority of the retail stores still rely upon curb parking, often times occupied by the adjacent store proprietor or employees, thus leaving limited customer spaces.

The economy of a retail area is closely related to traffic movement in the area. Retail sales directly reflect the volume to the point of traffic congestion. That point has not yet been reached and retail areas remain convenient to persons driving through or living in the area. Therefore, further increases in traffic flow will not yet reduce sales volume but a congestion level that discourages shoppers must be avoided.

Except for the downtown parking mall, only limited off-street parking exists downtown with many poorly maintained vacant lots and informal parking occurring on unpaved lots in several locations. A significant advantage of parking downtown is the absence of stringent time restrictions and parking meters, both of which discourage shoppers. The inability to provide adequate off-street parking in the older sections of downtown discourages the renovation of existing buildings and tends to reduce the development of vacant parcels for new businesses.

Increased parking demands will probably occur only if more customers are attracted to the downtown area as a result of improvements. The parking demand generated by existing

development is satisfactorily accommodated on the most part by the existing facilities. However, limited parking, in turn, could retard private investment in downtown development.

In order to reduce the dependence on the automobile and to reduce traffic volume, alternative methods of transportation need to be encouraged. The use of bicycles is practical and beneficial as an alternative mode for short trips within the City. A system of bikeways and standards for development will be developed and adopted as part of the General Plan. These will be developed in conjunction with the recreation element of the General Plan. Areas for bikeways and bike routes shall be planned as part of the entire circulation system and developed as an integral part of new development projects. An eventual system that shall tie in the schools, * recreational areas, as well as shopping and employment areas, and will serve to not only reduce traffic but serve as a major attractive feature to the area.

While mass transit is not as viable as in larger population centers, the City has experienced considerable success in its Dial-A-Ride Public Transit System. Efforts like these should be expanded in scope of coverage, time of operations and availability as the area develops. The Tehachapi area is also served by major bus lines. The City has an airport but it does not currently have any regularly scheduled commercial air service. However, private charter flights are available. While the Union Pacific Railroad passes through the City, it has not provided passenger service along this line since 1972.

The City of Tehachapi was originally developed by the Southern Pacific Railroad, which still has offices and equipment yards of the railway within the City. This railroad line is a vital link across the Tehachapi Mountains with over 30 trains a day passing through the City. The railroad divides the City into two halves with crossings only at Green Street, Hayes Street and Dennison Road. A proposed crossing at Mill Street and has been incorporated into the adopted Capital Facilities Plan and the proposed Redevelopment Plan.

The street system is not only essential to the City but to the outlying areas which must travel either through or to the City. A street system, to be effective, must be designed to accomplish certain goals. Without intelligent guidelines, streets are likely to be haphazard in layout, and a poor circulation system will prevent the orderly growth of the community.

The routes outlined on the circulation map and the restrictions listed below are general in nature to specific studies and consideration of existing conditions in each instance.

1. Majors - are interregional roads conveying traffic between communities, subdivisions, and other urban centers. Efficient movement is the primary function of arterial roads; hence, private access and frontage should be controlled and limited to high volume generators of vehicle trips (100-foot minimum of right-of-way).
2. Secondaries - conduct and distribute traffic between streets of lower order in the streets hierarchy and high order streets or major activity centers. This is the highest order of streets appropriate to a residential project and frontage along it should be prohibited or severely restricted (86-foot minimum right-of-way).

3. Boulevards - are wide, tree-lined, park-like corridors with limited traffic, pedestrian paths and bike routes. Residential access is encouraged. Boulevards become an important extension of the Open Space System (100-foot minimum right-of-way).
4. Collectors - consist of all other dedicated public streets. They are primarily intended to provide for direct public access for neighborhood development residential projects and to carry traffic to secondary and major streets (60-foot minimum right-of-way).

Goals

Provide a circulation system which supports planned land uses.

Promote the efficient transport of goods and the safe and effective movement of all segments of the populations.

Protect environmental quality and promote the wise and equitable use of economic and natural resources.

Objectives

Provide for the safe movement of vehicles and pedestrians by the reduction of hazards through proper design and forethought.

Minimize the cost of maintaining the street system by providing streets designed for existing and future traffic, but not over designed, and by the development of street improvements in a logical sequence to improve traffic flow and related parking congestion.

Design streets to enhance the rural quality of the area, yet provide diversity and character to the neighborhoods without repetitive dullness or squandering of resources.

VII. HOUSING ELEMENT

As specified in the Housing Element Legislation, program strategy includes goals, objectives and policies, which support the overall program design. The goals, objectives and policies are statements, which should continue to be valid over time, regardless of program availability or funding availability.

The following statement of Tehachapi's housing goal is intended to provide a framework for the housing program detailed in this part of the Housing Element:

Goal

Provide an adequate supply of sound, affordable housing in a safe and satisfying environment for residents and others who wish to live in the City of Tehachapi.

Objectives

The following objectives are intended to provide an overall framework for efforts to meet the City's housing goal. They reflect the community's priorities at the time of adoption of the Housing Element. As such, they will be evaluated periodically for their continued applicability to the City's housing problems and needs, and will be modified as necessary to be responsive to changes in the nature of those needs over time.

Support the development of new sales and rental housing in numbers adequate to accommodate anticipated demand and at a variety of prices suitable to the current and projected pricing needs of the community; and support housing development actions in adjacent Kern County unincorporated areas so as to complement housing production within the City.

Increase the supply of sound housing in the City through the rehabilitation of as many housing units as is feasible given the financial and technical resources available or to be available over the next five years, and support housing rehabilitation activities in adjacent Kern County unincorporated areas so as to complement improvement activities within the City.

Maintain the supply of sound housing in the City through conservation of the currently sound stock and support housing conservation efforts in adjacent unincorporated areas.

VIII. CONSERVATION ELEMENT

While resources must be shepherded more effectively in the future, if we are to improve the quality of life for all citizens, care must be taken to insure that a balanced perspective is maintained. Traditional freedoms must be preserved and not subjected to unnecessary restrictions. A projection of conservation needs of the Tehachapi Valley, as a whole, should be in line with estimated population growth. By developing appropriate conservation standards, Tehachapi will have a definite framework within which to develop specific goals and policies to meet the needs of new population.

Goals

The following are the existing goals regarding conservation:

Develop and maintain a series of land conservation policies, including standards and criteria which can serve as guides to the planning efforts. These efforts are developed in order to accommodate conservation, development and utilization of natural resources consistent with the - production and wise management of our natural resources.

Fulfill the responsibilities of each generation as trustee of natural resources for succeeding generations.

Assure for all citizens safe, healthful, productive, and aesthetically and culturally pleasing surroundings.

Attain the widest range of beneficial uses of the natural resources without degradation, risk to health or safety, or other undesirable and unintended consequences.

Preserve important historical, cultural, and natural aspects of the natural heritage as a main aim, wherever possible, an environment which supports diversity and variety of individual choice.

Achieve a balance between population and natural resource use which will permit high standards of living and a wide sharing of life's amenities.

Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

Objectives

The existing objectives of the Conservation Element are as follows:

Provide the Planning Commission and the City Council with guidance to carry out the goals and policies "to protect, conserve, develop, and utilize the natural resources and wildlife of the state".

Preserve the rights of the people to the enjoyment of the environment.

Assure access by the public to open space and recreational facilities.

Maintain areas of natural beauty and make them available for enjoyment by the people.

Propagate and protect fish and game.

Maintain and improve wildlife habitats.

Acquire and improve land and water areas for recreational purposes.

A. Water

There are two sources of water in Kern County: groundwater, occurring in subsurface aquifers and extracted by pumping wells, represents the major source of domestic water; and surface water from streams and imported water, used mostly for agriculture, represents a secondary source.

Groundwater is an important resource and should be considered in a management context like other resources. Although groundwater reservoirs are extensive, they are neither infinite nor impervious to contamination.

It is possible to evaluate the natural recharge rate, the discharge rate of underground reservoirs and to determine the potential for artificial recharge.

Imported water or stream water which is allowed to percolate or be pumped into an underground aquifer is used in the recharging process.

The chemical and biological properties of the water can be determined, as well as the susceptibility of the reservoir, to contamination from such things as effluent from sewer systems, pollution from discharge of industrial waste, or invasion of the reservoir by salt water. Having these capabilities, it is possible to design and establish a program of groundwater reservoir management at will provide optimal use of the resource.

Goal

It is the goal of the City to conduct an adequate conservation program to insure a supply and quality of water to meet the present and future needs.

Obtain maximum benefit from limited imported water resources.

Utilize only safe yields from groundwater basins. 9.3:2 Objectives.

Promulgate specific policies regarding water conservation and quality which includes:

Prevent discharge of wastewater in a manner that permits it to contaminate water.

Dispose of solid waste in a manner that prevents the contamination of water.

Analyze and evaluate all proposals for wastewater systems in terms of the cause and effect relationship of those proposals on the natural resource elements of the total environment.

Base priority for utilization of water on all factors associated with both the source and the contemplated uses of the water.

B. Flooding

The hydraulic force of water can be devastating in certain instances. Dry stream beds become torrents during rain storms, sheet floods traverse flat terraces, and streams enlarge to the point where they fill the floodplain.

There are areas that are so adversely affected by the hydraulic forces of water that their use should be restricted to that of open space. No structural development should be permitted in these areas because of the hazard that exists.

Other areas are adversely affected by the hydraulic forces of water; however, the forces do not reach the same magnitude as those described above. In these areas special construction methods and standards must be employed.

Regulations, therefore, frequently have two parts; one deals with channel encroachment and the other deals with the floodplain. Failure to distinguish between these two parts will result in a misleading interpretation of the zoning ordinance and any court action related to it.

In the floodplain channel, imposition of zoning and Land Use restrictions in order to protect the safety of the residence is a legitimate action; and the prohibition of any development may be a legitimate use of the zoning power.

Restrictive zoning within the floodplain, as proposed in this section, will be designed to protect the public interest. It suggests an undertaking legitimately within the police power. Here, specific uses are designated and construction methods and standards are required. Parks, recreational areas, mineral extraction, field crops, tree farms and similar uses are encouraged.

Ultimately, the validity of flood plain zoning will be sustained under the police power where there is some risk of flooding and the regulations permit a reasonable degree of use or provide for administrative relief.

A substantial inducement for communities to adopt floodplain zoning exists as a result of the National Flood Insurance Act of 1968 (42 USCA Section 4011 et seq., 1970). Under the act, the Federal government provides subsidies towards private flood insurance for residences and up to medium-sized businesses. Insurance is available only where governments in the area show a tangible interest in curbing flood hazards, including promised adoption of appropriate land use and control measures. Insurance is also available against mudslide damage, under similar criteria for eligibility.

Goals

It is one of the goals of the City of Tehachapi to implement a program that minimizes the danger caused by hydraulic forces of surface water.

Objectives

Minimize areas in which water hazards presently exist in order to protect the lives and property of citizens.

Engineering studies will be made to determine the hazardous areas.

Areas identified as being adversely affected by flooding should be zoned in a manner that provides the degree of safety compatible with the degree of risk.

To provide for storm water discharge in a manner that protects development from the hydraulic forces of storm waters.

Implement a management program to prevent the erosion of soils, sand, and minerals.

C. Forests

The primary value of forests is for wildlife habitat, watershed, recreation, open space, and wilderness; yet, they have a very significant secondary value for the production of wood products and scientific purposes.

California has been a forest rich state for generations; however, most of the resources are concentrated in the mountains and the northern part of the state. Those forests in Kern County and, particularly, those within the sphere of interest of the City are considered to be significant resources, vital to the economy and enjoyment of the citizens. This resource is one that must have good management so it can be conserved, developed, and utilized.

Forests do not exist within the City of Tehachapi, but it is felt these statements are necessary because the forests affect the water sheds and because of the people's concern for natural resources within the City's primary sphere of interest.

Goals

It is the goal, of the City to express its interest in the forest land and work with the various agencies for the conservation, and development of this resource, and to support the replanting of forests for their future multiple use benefits.

Objectives

The water supply of the City is indirectly affected by watershed management of which the forests are an integral part. To this end, the City will support - and assist the various agencies which have jurisdiction over the forest land to conserve and develop the forest lands for the benefit and enjoyment of the citizens.

D. Soils

Many factors influence the value and use of soil such as the degree of compaction in the subsoil, salt content, steepness of slope, drainage, and natural fertility. The amount of alkali salts is closely correlated with the degree of compaction and permeability of the subsoil in basin areas.

Many factors besides the character of the soil influence the suitability of crops in an area. The most important is the availability of water for irrigation. Soils derived from certain rocks are more fertile than others; some are suitable to one crop, but not to another. Many elements of the agricultural industries depend on the nature of the vegetation which, in turn, is directly related to the geological formation from which the soil was derived.

Some soils are extremely vulnerable to erosional forces. The natural balance of nature can be upset by improper cut and fill operations. This is particularly true in

urban areas where new developments are taking place. In urban areas, soil erosion is often triggered by improper grading procedures which expose steep slopes to water erosion without proper erosion control methods.

It is important that prime agricultural soils be preserved for agricultural uses to the extent feasible and that other soils be used in accordance with their structural and compositional characteristics. It is also important to prevent erosion of soils and, erosion caused by inappropriate grading practices and thus

Goals

It is the goal of the City of Tehachapi to develop land uses that are compatible with the capability of the soil to the extent possible and to discourage the improper use or waste of soil by inappropriate use or erosion and to prudently utilize the inherent capabilities of all soil groups to serve both short- and long-term interest.

Objectives

The City will identify, using the best available technology, areas of unstable soil.

Development in all areas will be governed by the capability of the soil to sustain such development.

Intensive agricultural land conservation programs will be restricted to lands having soils capable of supporting intensive agricultural activities which are economically feasible.

Steep and erosive soils will be - protected from unnecessary development.

Suitable soil conservation measures in all areas of Tehachapi Valley will be encouraged.

E. Water Resources

The quantity and quality of water are major elements in structuring land use planning regarding water resources. The uneven geographical distribution of water resources and water quality in relation to land use, a disparate, demanding urban and rural population, a wide variance in land quality and production, the need for protecting domestic use and the recreational amenities and scenic qualities all combine to give water planning, development, and protection a paramount role in shaping the Tehachapi environment.

As the City grows, the demand for water in homes, industry, and recreation grows. As we face the water problems of the future, we must ensure that the citizens may enjoy the beauty of the country and the quality of the environment may be protected and enhanced.

Planning for water development is a critical element in environmental protection because of the direct effect of large-scale water projects on the environment. Water development relates not only to the physical, but to the social, cultural, and economic aspects of the environment. It must be considered in terms of these effects, both beneficial and adverse, on the total environment.

Goals

Assure that land uses near water resource areas enhance the public interest and that an adequate supply and duality of water exists to meet present and future needs of the population, and;

Obtain maximum benefit from limited water resources.

Objectives

Develop and cause to be maintained a comprehensive area waters management program which utilizes water from streams and recognize recreational and aesthetic considerations.

Base priority for utilization of water on all factors associated with both the source and the contemplated use of the water.

Watersheds should be protected - to the extent feasible from development which would have adverse effects on them and reduce the effectiveness of water retention and release.

Multiple use of water resources such as recreational use or waterfowl habitat use should be promoted in conjunction with groundwater recharge areas and wastewater facilities.

Water contamination should be avoided by requiring suitable lot sizes in developments not providing sewage treatment facilities.

F. Fisheries

Renewed efforts are needed to reach satisfactory arrangements to provide fisheries and permit public fishing on private waters . Rural lands and waters in private ownership, chiefly in small farm holdings, offer a promising opportunity for expanding the public fishing resource base.

Local fish resources are the responsibility of the individual States and historically have been managed by them. The Bureau of Sport Fisheries and Wildlife is in a favorable position to work closely with the States and other levels of local government in meeting emergency recreational problems. The City endorses the current program of land acquisition, carried out in cooperation with the States, to provide suitable habitat.

Fisheries are not found within the City, however, the sphere of influence includes such facilities.

As part of the Water Importation Project, the Tehachapi-Cummings County Water District is creating a storage reservoir approximately seven miles west of the City. The Water District has entered into an arrangement with the Tehachapi Recreation and Parks District to develop the reservoir for recreational purposes. In addition, warm and cold water recreational fishing opportunities exist at the communities of Bear Valley Springs and Stallion Springs or part of these communities amenity package.

Goals

Encourage State research to find new ways to provide and manage fisheries and to develop new techniques for establishing recreational fishing areas.

Objectives

Encourage the State to take all possible measures to protect and improve the management of fisheries.

Expand pollution control efforts to improve water quality for fish.

Encourage privately owned fishing activities.

G. Wildlife

Some of the critical concerns of wildlife and natural habitats is centered on rare and endangered species. Generally, a wildlife habitat is an area which has a combination of factors such as terrain, soil type, and rainfall which produce specific conditions favorable to the propagation of certain animals. When this delicate balance of nature is disturbed by manmade factors, the animals that cannot adapt to the new environment are endangered with extinction. In many cases a few continued to survive but eventually the species exists no longer.

The California Condor, Tehachapi Slender Salamander, and the San Joaquin Kit Fox are examples of endangered species in Kern County. There are many more animals that are in need of conservation, such as quail, chukar, rabbit, bear, deer, water fowl, and many more game animals. Kern County is among the top four counties in California in which quail and rabbits are taken by hunters. It is also a major residence of chukars.

These animals are hunted by people living in the vicinity as well as those from the surrounding metropolitan areas. The hunters of these animals contribute to the economy of this County.

Land administered by the Bureau of Land Management and the United States Forest

Service provides large areas of wildlife habitat within the County. The Fish and Game Department manages programs on lands having public access. Private land is also used as hunting grounds where the hunter leases rights of access and use.

The City of Tehachapi falls within the range of the California Condor. However, because of the City's urban nature, the Condor does not frequent the City but merely passes over it as the Condor migrates from the Tehachapi Mountains on the south to the Sierra Nevada Mountains to the north. At the present time, all known Condors (about 40) are in captive breeding programs. This program is having some success, and reintroduction of the species into the wild has occurred.

Deer and bear may be found at higher elevations in the mountains surrounding the Tehachapi Valley.

Although the City has no jurisdiction over these wildlife areas, the City will encourage those agencies having jurisdiction to take necessary steps to ensure the habitats are preserved.

Within the City, small birds and squirrels frequent the City parks, and these forms of wildlife are encouraged.

While lands inhabited by most wildlife are not located in the City, the citizens have a vested interest in the conservation of wildlife habitat.

Goals

Promote the survival of all existing wildlife types, both indigenous and introduced.

Properly utilize wildlife resources for recreational benefits.

Reduce loss of key wildlife habitat to uses which are detrimental to wildlife types.

Objectives

The preservation of all species of animals is deemed essential to the citizens of the City. Public and private owners of wildlife habitat are encouraged to operate these areas in a manner that reflects good management principles and conserves the wildlife habitat.

Within the sphere of interest of the City, the effect of land use projects and wildlife habitat will be reviewed by the Planning Commission in the decision-making process.

Land uses known to be detrimental to wildlife habitats will be guided, if feasible, to other areas where such use would not be detrimental to wildlife.

Land use activities in important wildlife habitat areas should be restricted to that which is tolerable by the wildlife inhabitants.

Sustained yield concepts of wildlife management to promote the use of wildlife resources for recreation purposes should be encouraged.

H. Minerals

One of the area's basic industries is mineral extraction and processing. Kern County is the largest producer of minerals in California, with a production value of almost a quarter of the State's total.

Minerals of many types are found throughout the County. Most areas of high mineral content are not actively mined or are dormant because of the high extraction costs; however, the potential for future mining activities exist, depending on the extent of the mineral bodies, quality of the material, and prevailing market price. Industries and mineral processing plants associated with the mining industry should be located within the designated mining areas, depending on such factors as water availability, labor source, transportation costs, and environmental considerations. The Calveras Cement Company is a major cement mining and production facility within the City's sphere of influence.

Goals

Judiciously utilize the natural resources for the benefit of the people of the area without detriment to the environment and insure efficient use of the natural resources.

Efficiently utilize all available minerals and mineral resources found in this area without unnecessary damage to the environment.

Objectives

The aesthetic nature of the landscape is to be preserved. Mining and mineral processing operations should not be detrimental to the use capability of surrounding properties because of noise, odor, dust, vibration, or related hazards and inconveniences.

Mineral processing operations should be located close to the material source.

Large-scale displacement of earth should be avoided whenever alternate economic methods of extraction are available.

Mining shall not have an adverse effect upon water sources and watersheds.

Consideration shall be given to protect wildlife and livestock from the dangers of mining and other product extraction.

Identified mineral lands should be regulated to uses which will not restrict or deter potential mineral production.

There feasible, rehabilitation of the natural landscape after mineral production and extraction has ceased should be required in conformance with SMARA (Surface Mining and Reclamation Act).

I. Botanical

As a natural resource, the botanical community is frequently slighted when conservation programs are proposed, yet this classification is vital to a balanced program. Kern County is ideally located at a point where high desert, low Great Central Valley, Sierra Nevada, Tehachapi, and Temblor Mountains converge to form a variety of environmental conditions. The confluence of these various botanical regimes has produced a large array of natural plant communities. Specialized vegetation associations include botanic species that are unique to Kern County. In some instances, there are areas that exist as remnants of pre-existing natural vegetation which has been either eliminated from other vicinities or, in response to environmental changes created by human occupation, have been greatly altered in their organic structure.

Those natural botanic communities that remain, especially those endemic to Kern County are worthy of protection. Existing land use practices do not provide protection, but pose a real and immediate threat to some of the unique plant communities. In most cases the botanic areas have the capability of also supporting additional open space uses that are compatible with the plant life. Limited livestock grazing is frequently compatible with many varieties of plants. All botanic areas serve as wildlife habitat - some encompassing the prime habitat of several rare and endangered animal species. A well developed program can provide protection for multiple uses and, thereby, enhance the overall value of the project.

Goals

Preserve natural area as having unique and/or endangered plant types or plant communities.

Objectives

Areas contain unique plant life should be restricted or human use activities minimized, so uses will not be detrimental to plant types.

The inclusion of identified areas containing unique plant life into specific land conservation programs by all governmental agencies should be provided.

The off-road vehicle use in identified unique plant life areas should be controlled.

IX. OPEN SPACE ELEMENT

The Open Space Element expresses both the new and very critical role of the planning function in relation to the communities' needs and the power of the municipality to deal effectively with these needs. The land use policies expressed here represent the culmination an in-depth consideration of alternative land use plans for the area.

The policies and objectives of the Open Space Element are predicated on the goals that are established. These goals form the core around which the entire program is formulated. The statements found in this section express the wishes and desires of the people for the long range, orderly development of the open spaces program.

Goals

Provide for both public and private interests in the development of essential open space facilities which have the greatest possible benefit for the largest number of citizens.

Conserve open space areas which will help perpetuate the unique natural and cultural setting of the region for the enrichment of its residents.

Preserve a desired livable environment in which the physical development, as well as, the enjoyment of the area is enhanced.

Achieve a balanced distribution of open space land which will provide an attractive environment essential to a sound economy.

Establish prime agricultural land uses in order to prevent premature conversion of urban land to subdivisions.

Prevent adverse effects of urban sprawl and other forms of urban development.

Maintain an appropriate balance between physical development and the preservation of open space to meet the needs of the inhabitants for recreation and the amenities.

Reserve adequate sites in neighborhoods, communities, and unincorporated areas for future schools, parks, and public facilities.

Provide open space for public facilities (sewer, water, solid waste disposal, and power sources) to eliminate water, air, and noise pollution.

Encourage efficient public spending for acquisition of rights and titles to open space lands.

A. Scenic Land

Land which possesses outstanding scenic qualities worthy of preservation is essential to every community. These lands can be areas which are uneconomical to develop in

conventional ways. Rock outcrops, hills, and depressions can become scenic lands if properly developed. Such areas can become important assets to an urban community.

Goal

Every effort will be made to identify, develop, and preserve scenic qualities worthy of preservation. Scenic qualities are important to preserve because they tend to provide an identity to a community and provide for the wellbeing of the citizens.

X. SAFETY ELEMENT

A. Fire Hazards

The following goal and objectives are adopted as guides for the plan development and implementation:

Goal

Protect the health, safety, and welfare of the people from fire.

Objectives

Provide fire control service capable of responding quickly and efficiently to meet any emergency.

Prevent fires through an ongoing program of education, inspection, and abatement.

Provide sufficient equipment and manpower to adequately respond to fire alarms in all parts of the City.

Insure that buildings are designed and equipped for an adequate level of fire protection.

Insure that Fire Department personnel are trained to meet all situations under their jurisdictions.

Promote and encourage adequate fire control within the entire sphere of influence, including:

Establish and maintain evacuation routes.

Require minimum road widths.

Provide for peak load water supply.

Require minimum clearance around buildings.

Promote all reasonable interjurisdictional cooperation plans.

Promote community education and understanding of the functions and responsibilities of the Fire Department and of the citizens themselves.

B. Natural Geologic Hazards

Goal

Protect the health, safety, and welfare of the people from natural causes related to earthquake.

Objectives

Require an overall disaster plan.

Maintain an adequate emergency control center.

Prevent injury and economic loss.

Ensure that the City's facilities, equipment and supplies are protected.

Require evacuation routes and maintain and develop road widths compatible with emergency equipment.

Ensure peak load water supply.

Encourage community education and understanding of the potential risk from natural causes.

C. Flood Hazard

The following goal and policies are adopted as a guide for plan development and implementation.

(**Refer to Conservation Element, Flooding Section 9.4)

D. Man-made Hazards

Goal

Protect the health, safety, and welfare of the people from man-made causes.

Objectives

Insure that buildings are designed and equipped so an adequate level of protection is maintained.

Require new construction to adhere to the Uniform Building Code.

Encourage community education and understanding of the risks related to:

- 1. Electromagnetic fields,*
- 2. Pipelines,*
- 3. Dams, and*
- 4. Factories and processing plants.*

E. Seismic Safety

Goal

Introduce safety considerations in the planning process in order to reduce loss of life, injuries, damage to property, and economic and social dislocation resulting from dangerous geologic occurrences.

Objectives

The following policies are adopted to provide guidance to the decision-makers for the planning of safer communities and abatement of seismic hazards.

Provide a disaster management system embodying all aspects of pre-disaster preparedness and post-disaster response in accordance with established risk standards.

Plan land uses so areas of seismic rupture are not developed.

Conduct periodic structural and other types of building inspections.

Conduct a public awareness program with property owners and with the general public, through the news media, to create public awareness and subsequent hazard reduction.

Conduct an ongoing program for the correction of substandard conditions.

Prepare for prompt and effective rescue, care and treatment of persons victimized or threatened by disaster.

Carry out drill programs at schools, hospitals, and public buildings to train the occupants and staff in emergency techniques.

XI. NOISE ELEMENT

The Noise Element is a mandatory element of the General Plan (per Government Code Section 65302 (g)), which requires development of noise contour maps on which points of equal intensity are connected. These maps, based upon present and projected noise emissions of major transportation elements, will guide transportation site and route selections, and land use planning. In addition, airport noise is only included in regard to ground-facilities generation. Noise from airplane flights is covered elsewhere under earlier legislation, which is part of the California Administrative Code, Title 4, Subchapter 6.

Goals

The goal of the City is to improve the noise environment within its jurisdiction, and to maintain an acceptable total noise environment.

Objectives

Objectives of the Noise Element are to minimize disruption of human activities and reduce social conflicts; to maintain property values, and consequently, the economic base of the community; and to protect the public health, safety and welfare.

XII. PUBLIC FACILITIES IMPROVEMENT ELEMENT

Integral to the Tehachapi General Plan Update are Public Facilities improvements which need construction and financing. This is especially critical in the areas of flooding, water, sewer, and schools. Also of importance are other services including fire, police, and utilities.

Goals

Ensure the timely, logical and cost-effective development of infrastructure facilities.

Provide for urbanization, through both infill and development of vacant areas, in a responsible manner, which balances growth with adequate infrastructure.

Reduce dependency on imported water supplies to support future growth.

Reduce wastewater generation.

Develop environmentally sound reuse of treated wastewater.

Continue to provide for the safe collection of solid waste from Tehachapi's residents.

Provide for the adequate, timely and economically sound development of flood protection facilities for Tehachapi's residents.

Establish alternative uses within major flood control structures.

Community services shall be provided to meet the needs for education, cultural entertainment, protection of public safety and health, and civic pride.

Ensure the timely, logical and cost effective development of public service facilities.

Objectives

Development shall be phased in accordance with the provision of necessary circulation system improvements, utilities and services.

"Leap-frog" types of development (i.e., development which is not incremental and contiguous to related uses) shall not be permitted unless planned communities' with intervening agricultural land uses are approved by the City.

Financing plans for infrastructure capital improvements in large developments shall be required as a condition of approval.

Public Facilities in the form of domestic water distribution, sewer collection and storm drain collection, shall be evaluated to ascertain where deficiencies exist toward accommodating future growth and adequately serving the existing community.

Create Financing Districts for the development of vacant areas.

Encourage the conservation and development of local water resources.

Guard against contamination of existing water supplies.

Investigate feasibility of reclamation usage for park irrigation where possible.

Develop standards for minimizing water use.

Investigate reuse options of wastewater.

Encourage the reduction of the local waste stream by an AB 939 recycling program.

Support and encourage the implementation of the Comprehensive Storm Drain Plan.

Create community facilities-districts that will equitably distribute the financing of flood control infrastructure.

Support and encourage multi-use of flood control facilities for open space and recreation uses such as bikeways, wildlife habitats, etc.

Achieve and maintain an adequate number of sworn police officers.

Achieve and maintain the highest ISO fire rating possible.

Achieve and maintain adequate fire engine companies.

Achieve and maintain efficient fire and police emergency response times.

Development shall be phased in accordance with the provision of necessary public services and facilities.

Financing plans for capital improvements of public facilities in and near (offsite) large developments shall be required as a condition of approval.

LAND USE ELEMENT

Adopted on August 19, 1996

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1. INTRODUCTION

A. PURPOSE OF GENERAL PLAN

A General Plan is a statement of long-range public policy to guide the use of private and public lands within a community's boundaries. The General Plan reflects the aspirations and values of its residents and is adopted by the elected representatives. The policies within the Plan are intended to become the basis for decisions by elected and appointed officials. By this means, the values reflected in the General Plan policies shape the community and the quality of life sought by its residents.

The Plan is both general and comprehensive in that it provides broad guidelines for development in the City, while addressing a wide range of issues that will affect the City's desirability as a place to live and work. The General Plan represents both an evaluation and vision of the future, typically 15-20 years, and beyond. The goals and policies are aimed at guiding growth and development in that direction.

It is an internally consistent document in that the goals, objectives, policies, principles and standards present a comprehensive, unified program for development. California planning law requires consistency between the General Plan and its implementation programs-zoning and subdivision ordinances, growth management policies, capital improvements programming, specific plans, environmental review procedures, building and housing codes. Thus, there is a strong connection between a community's policies and regulator system, with the General Plan.

The General Plan should not be viewed as a final statement of the City's vision. With time, its population will change, its goals may be redefined, and the physical environment, in which its residents live and work, will be altered. The Plan simply represents a depiction at this particular point of planning policies applied to the future. As a result, the General Plan may periodically be revised to respond to and reflect changing conditions subject to full public participation as required by state law and to the criteria identified in the Implementation section of this General Plan.

B. VISION STATEMENT

Tehachapi has been transformed from a rural agricultural town into an urbanizing community with a 1993 population of approximately 6,700. The growing process has brought thoroughfares and freeways; major shopping centers; a townsite or downtown revitalization effort, including streetscape and facade improvements.

Like in other areas substantial growth has also resulted in challenges concerning public facilities and services, air quality, traffic, water availability, environmental

protection and open space. Therefore, the General Plan includes Quality of Life Statements and a Facilities Element to assist in sustaining these standards.

The General Plan is a comprehensive document with policies not only directed at land use and private development, but also public facilities and services. Furthermore, it includes community goals regarding human, needs, such as housing, as well as our cultural enhancement.

The implementation of the General Plan will not only result in land use ordinances directing development, but will also attempt to coordinate programs which complement each other rather than compete with each other. With implementation of the goals and policies of the General Plan, the following is envisioned for Tehachapi.

1. TOWNSITE OR DOWNTOWN

A City's identity is reflected in its downtown area. As a result of the Townsite Specific Plan and projects approved by the Planning Commission the downtown will be a specialty activity center for the City. Anchored by City Hall, the downtown area will continue to be revitalized as an attractive place to work, shop, and reside. The pedestrian-oriented retail core will complement the attraction of the commercial recreational activities, resulting in daytime and nighttime activity. New industrial and commercial uses for the railroad right of way will be sought along with preservation and stabilization of established residential activities.

Facade improvement programs, Street improvements and quality design standards will be adopted and result in a downtown that is a source of pride.

2. URBANIZED CORE

The urbanized core area essentially surrounds the Townsite Specific Planning Area. It includes industrial and commercial development between Tehachapi Boulevard (business loop 58) and the Tehachapi Municipal Airport and Wastewater treatment facility.

Also the residential neighborhoods south of Tehachapi Boulevard to "C" Street, and between Mill and Snyder Streets. Special neighborhood standards for these areas will enhance and improve their aesthetic and economic quality. Revitalization efforts will be applied to existing commercial and industrial areas, especially where there is high visibility. Existing residential areas will be preserved where single-family neighborhoods are well established and new housing opportunities will occur where substandard housing stock and infrastructure deficiencies exist.

3. DEVELOPING AREAS

Surrounding the urbanized core area are many established neighborhoods with vacant or underdeveloped properties still available for growth. As a result of development policies, plans will be adopted to ensure that adequate municipal services are provided in timely manner.

Coordinated efforts of City government, private development, existing residents, and other agencies providing facilities and services will result in strategic planning to ensure acceptable quality of life standards for new and existing development.

The developing areas include land use designations, which generally reflect topographic constraints, the need for environmental protection and the preservation of the character of established neighborhoods. With implementation of the General Plan through public and private endeavors, growth will be managed to ensure compatibility, sensitivity to the environment and adequate public services.

4. PERIMETER AREAS

The natural setting of Tehachapi is surrounded by prominent hills and ridgelines to the north, west and south while there is level open land to the east. To the west in addition to the topography the Golden Hills CSD and specific plan area adjoined the Tehachapi sphere of influence boundary. To the south the Mountain Meadows Community Service District adjoins the City of Tehachapi at Highline Avenue. This county specific plan area is a rural large lot area that is near the Fantasy Haven Airport and includes Antelope Dam and Black Burn Dams, all of which are just south of Highline Avenue.

Further to the east and north of Black Burn Dam is the Oak Tree Specific Plan area that has been approved in the county but as of yet is undeveloped. This project would extend from Steuber Road to Tehachapi Willow Springs Road on the south side of Highline Avenue.

To the north, the opportunities for future growth and development for Tehachapi appear to be more appropriate. There are no existing entities to impede or stop creative new developments that the City might be able to consider. The Loop Ranch Specific Plan area along with the steeper topography immediately to the north and east of the Capital Mills parcels provide opportunities for larger ranchette type parcels that would have spectacular views and be quite well suited to the terrain. The remainder of the parcels to the north of State Highway 58 have various urban/rural opportunities based on access, topography and the availability to municipal services.

Hillside development while it has not occurred in the Tehachapi area especially to the north, it is important that the development of this natural terrain, will require policies to control grading, lot size and establish landscape measures necessary to protect the setting. The land use designation shown on the General Plan is for agriculture at this time as opposed to other land use designations. The agricultural activities that could occur will need to have requirements stipulated so as not to grade or detract from the natural beauty of the rugged ridge lines or slopes that exist in this area.

5. TRANSPORTATION

Approximately 50% of the land within the existing City limits of Tehachapi is built out in terms of meeting development objectives. Many Street segments will continue to need urban improvements in order to facilitate improved traffic circulation. To this end the Circulation Element will address details at intersections and along key arterial travel ways. The important aspect of transportation and circulation will focus on making the eastwest SR 58 corridor more suitable for development, especially for industrial and commercial purposes. The linkage between Capital Hills and the downtown area will require important street improvements. This location is appropriate for municipal transportation facility upgrades and provides a tremendous opportunity to direct future growth in SR 58 corridor. The Tehachapi Municipal Airport, freeway access and a large-scale project with municipal services in place is another growth opportunity. The circulation and transportation improvements in this vicinity would channel new development and land uses with higher trip generations, and locate these land use activities along a regional transportation route. A circulation transportation system that is proposed will need to have implementation measures included as a part of the program.

6. COMMUNITY IDENTITY

With the implementation of the General Plan, Tehachapi is expected to serve as the regional commercial, industrial and transportation center for the Greater Tehachapi area. Future development of the Capital Mills area and revitalization efforts within the downtown/townsite area, it is expected that the urbanized core will not only provide for various housing choices but will allow for specialty commercial and entertainment/tourist opportunities. It is expected that the tourist industry because of many of the community activities sponsored by the Chamber of Commerce and other community groups will help improve Tehachapi's image as a tourist oriented location.

Community involvement over the past several years has been high and continues in areas of volunteer participation. Because of Tehachapi's attractive setting and beneficial climate a strong sense of community pride and participation is anticipated as a result of fulfilling the goals of this plan.

C. COMMUNITY GOALS AND OBJECTIVES

The Tehachapi City Council has supported the need to solicit wide spread community input on the goals that should direct the community's future. Several Planning commission hearings have taken the goals program into account and workshop meetings between the Planning Commission and the City Council considered these goals and objectives. The goals while they are general in nature provide for implementation, specify the objectives and set forth practical policy necessary for the creation and use of ordinances and management procedures.

GOAL 1: Plan for Quality Growth

Objectives:

- a. Establish a system that develops facilities and services both community-wide and for specific neighborhoods based on identified quality of life standards.
- b. Adopt policies encouraging compatible in fill development, which will improve existing neighborhoods and services are adopted for the area for which development is proposed.
- c. Allow new development to occur when facilities and services are adopted for the area for which development is proposed.
- d. Improve coordination with County and surrounding CSD's regarding planning for areas beyond City limits to address the regional issues and to protect those goals and objectives of the General Plan.
- e. Develop and use, when appropriate creative ways and means to allow new growth to pay for its impacts on public facilities and municipal services.

GOAL 2: Improve Circulation Safety for Vehicles and Pedestrians

Objectives:

- a. Establish definable levels of service for intersections and arterial street segments, which will be incorporated into facilities plans.
- b. Enhance carrying capacity of existing streets and intersections in the urbanizing core, support public transportation, carpooling, and coordination of capital improvements programs and private development plans.

- c. Develop a circulation program that will determine impacts and evaluate mitigation measures to insure consistency with facilities planned.
- d. Improve bicycle and pedestrian safety through the installation and improvement of sidewalks, a trail system and coordination with the Kern COG and regional transportation facilities plans.
- e. Participate in regional transportation efforts.

GOAL 3: Preserve and Enhance Existing Neighborhoods

Objectives:

- a. Establish land-use designations, which reflect the character of existing neighborhoods.
- b. Adopt and implement area plans and innovative zoning to preserve and/or improve existing neighborhoods.
- c. Continue property maintenance programs through public information and code enforcement.
- d. Limit and evaluate the conversion of predominantly residential neighborhoods to nonresidential uses, and require effective buffers and mitigation measures when appropriate nonresidential uses are proposed.

GOAL 4: Provide Range of Housing Opportunities for All Income Groups

Objectives:

- a. Establish and maintain a current housing needs assessment through the Housing Element.
- b. Adopt land-use designations and zoning techniques, which allow for housing opportunities for all income levels.
- c. Continue support for housing rehabilitation.
- d. Promote well-planned and well-designed affordable housing.
- e. Support the continued operation of mobile home parks and develop strategies for mobile home resident ownership.

GOAL 5: Encourage a Diverse Economic Base to Provide Jobs and Services for Tehachapi Residents

Objectives:

- a. Support the rehabilitation of declining commercial and industrial areas.
- b. Continue to evaluate economic development strategies, including commercial, industrial, mining, agricultural, wind energy, office and tourist-oriented land used.
- c. Promote Tehachapi's role as the financial, medical, industrial commercial, and transportation center for the Greater Tehachapi area.

GOAL 6: Create a Viable Urban Downtown

Objectives:

- a. Create a distinct identity for the downtown by encouraging activities that traditionally locate in a pedestrian-oriented downtown area, including offices, restaurants, and specialty retail shops. Explore the use of the railroad right of way and existing apple sheds for trendy up scale tourist activities.
- b. Implement the Downtown Revitalization Plan through the adoption of a Specific Plan and incentive programs.
- c. Promote and revitalize residential development within the downtown (Townsite Specific Plan).
- d. Identify compatible uses in the Townsite Specific Plan, which will attract a high daytime and nighttime population in the area.

GOAL 7: Create an Aesthetically Pleasing and Culturally Diverse Community

Objectives:

- a. Continue the design guidelines and development standards to be the basis for design review of architectural, landscaping, signage and other visual impacts of development projects.
- b. Preserve significant historic and cultural features.

- c. Preserve natural resources such as creeks, steep slopes and visual amenities.
- d. Develop open-space corridors and bike trails throughout the City.
- e. Develop a strong community identity through urban design standards, downtown revitalization, cultural activities, and visual gateways to the City.

GOAL 8: Preserve Tehachapi's Natural and Scenic Resources

Objectives:

- a. Establish policies to preserve and reestablish visually prominent vegetation.
- b. Support environmental protection policies in this General Plan to protect or adequately replace sensitive habitat areas such as wetlands and oak woodlands, including coordination with state and federal agencies having jurisdiction over such areas.
- c. Establish density and development standards designed to protect existing terrain, steep slopes, floodways, habitat areas, ridgelines, and to minimize visual impacts.
- d. Develop and implement community-wide resource conservation programs especially related to mining and wind energy.

GOAL 9: Support Agriculture while Planning for Possible Land Transition to Urban Uses

Objectives:

- a. Maintain large-lot residential land uses with appropriate zoning designations in agricultural areas that are compatible with preserving agricultural productivity.
- b. Buffer agriculture from more intensive urban uses by project phasing and building setback standards.

GOAL 10: Provide Continued Community and Social Services for a High Quality of Life

Objectives:

- a. Adopt basic quality standards to guide the development of community-wide and neighborhood facilities where appropriate.
- b. Continue to support public and, privately operated community services programs to serve the entire community.
- c. Provide incentives for new growth and development to provide facilities, which exceed minimum standards and correct existing deficiencies where appropriate.
- d. Continue strong support of recreational programs for all age groups.

GOAL 11: Provide Certainty in Implementing the General Plan

Objectives:

- a. Observe the stringent and consistent objective criteria located in the Implementation Chapter, which must be satisfied before the General Plan can be amended.
- b. Revise zoning, grading and subdivision ordinances and adopt other ordinances including the requirements of facilities plans, which will implement the goals, and objectives of the General Plan.
- c. Adopt performance criteria within appropriate ordinances to ensure land use compatibility, environmental protection, and improvement of neighborhoods identified in the Land Use Element of the General Plan.
- d. Resist premature urbanization and sprawl whether in the City or the County.

II. LAND USE

A. INTRODUCTION

The General Plan arranges major land use to preserve the integrity and amenities of residential neighborhoods, as well as the economic vitality of industrial areas and commercial activities. The plan expresses land use policies in terms of broad land use categories, which indicate desired predominant uses.

The intent of land use policies and the land use plan is to protect and implement the goals and, objectives identified during the General Plan public participation effort.

The policies herein foster Tehachapi's role as attractive urban center nestled in an emerging environmentally sensitive area promoting the new economic opportunities and revitalization. The desire to concentrate on the small town character with an emerging industrial base to promote economic vitality is of vital concern.

1. POLICIES REGARDING GENERAL PLAN LAND USE PATTERNS AND CHARACTER

These policies intended to guide land use patterns and distribution. Policies concerning actual development are found in subsequent sections of this General Plan text.

- a. New development should serve to reinforce the City's present development pattern or the one chosen by the land use policies and identified in the Land Use Element. Careful review of the goals and the policies regulating land uses should be a criteria for determining density, development standards and other design objectives contained within zoning and subdivision provisions. These tools will help create the compatibility desired and expressed by the General Plan.
- b. The City should maintain its single-family land use pattern and except in locations such as along heavily traveled arterial streets, transportation corridors, and around public activity centers, where higher densities are more appropriate. Commercial centers such as Tucker and Highway 202 would be appropriate locations for higher density.
- c. Prior to major land use decisions the City will examine and analyze the extensions of municipal services and utilities to accommodate change in land use patterns. Significant growth inducement environmental impacts and excessive urban cost would be reviewed in order to evaluate the appropriateness of the decisions to change land use patterns. The policies of this document are intended to be appropriate to determine mitigation measures if changes to the land use are approved based on the request by applicants.
- d. The land use designations are not precise. They may be scaled from existing maps, compared and evaluated to topographic conditions, descriptive language and the general character of the area in question.

B. LAND USE CATEGORIES

1. POLICIES REGARDING RESIDENTIAL DEVELOPMENT

Residential Density is defined as the maximum number of dwelling units permitted per acre, including streets within the development, excluding all ultimate circulation element street right-of-ways, adjustments for floodways as defined by the Federal Emergency Management Agency (FEMA-see Flooding Map) and other environmental factors as designed in each land use category and/or open space/conservation element. Building intensity is based upon the number of dwellings per acre permissible in each category subject to constraints and opportunities provided by all General Plan policies. Limited nonresidential development, such as churches or schools may occur in residential categories subject to state and local ordinances.

New residential development shall be substantially contiguous to existing development. Development shall not occur unless at least 35% of a parcel is contiguous to existing urban development. This measure is intended to help reduce the unnecessary removal of finite resources, such as prime soil, to reduce the cost of community services provided to residents, and to eliminate “leap frog” development.

No development shall be permitted in natural 100-year floodways. If approved by the City and other appropriate local, state and federal agencies, an environmental channel may be considered within the floodway. Adequate landscaping, revegetation, flood control measures and usable open space beyond the embankments of the environmental channel shall be provided as determined by the City.

Subject to City approval, parcels legally created prior to the adoption of this General Plan and wholly within constrained land as defined in Land Use Policy may be eligible for the development of a single dwelling unit, providing the property meets minimum lot size for the zoning and land use designations.

The residential land use designation indicates **MAXIMUM** development yields. To meet General Plan goals and Objectives, including, but not limited to, population goals and environmental considerations, the, **ACTUAL** yield may be considerably less than maximum potentials.

Residential categories are established for purposes of providing the City with a range of building intensities to address various site constraints and opportunities. Proposed development shall not exceed the densities shown on the Land Use Plan and outlined in this document as follows:

- a. **Agricultural/Rural.** This agricultural/residential classification is applied to areas that are not intended to receive substantial urban services; that are distant from the developed valley floor; or that are steep generally between 15%-25% in slope) that are used for agricultural purposes or contain sensitive natural resources. Development in this classification is primarily detached single-family development on large (5 acres) lots, the size of which shall vary with slope. Water supply may be from individual wells or public water systems. Septic systems may be permitted provided that they meet local health standards and so not adversely affect the groundwater.
 1. Agricultural/rural is intended to promote a rural living environment in area of agricultural production, rugged terrain, environmentally constrained lands that are distant from urban development. The minimum lot size shall be five (5) acres.
- b. **Estate.** This residential designation is characterized by detached single-family homes on large lots. This designation is applied to areas that are on the fringe of urban development or in areas that are already characterized by an estate development pattern. Two different classes of the Estate designation are defined: Estate I and Estate II.
 1. **Estate I** - to promote a large lot, single-family development in areas bordering Rural lands. This designation encompasses and permits development at about two (2) acres or larger. Public water systems should be required; septic systems may be permitted, provided that they meet local health standards and do not adversely affect the groundwater. This classification is typified by development south of Highline in Mountain Meadows.
 - a. The minimum lot size shall be 80,000 square feet.
 2. **Estate II** - to promote single-family urban development on relatively large lots. This designation shall be applied in transitional areas between more intensive urban development and rural areas. Public water and wastewater collection and treatment shall be required in these areas. This classification typified by development at Sear valley Springs.

- a. The minimum lot size shall be 20,000 square feet. Planned development (clustering) shall comply with density provisions of 2.0 dwelling units per acre.
- c. **Neighborhood.** (up to 4.5 dwelling units per acre). Detached homes, characteristic of much of Tehachapi constitutes this density category. In addition, transitional density projects i.e., mobile homes, patio homes, and zero-lot-line developments maybe permitted in this category subject to special findings as outlined in the implementation section. Typical transitional development project at this density shall not exceed 6.0 dwelling units per acre.
 - 1. The minimum lot size shall be 8,000 square feet except for transitional projects approved by special findings.
- d. **Medium Density.** (up to 12 dwelling units per gross acre) This residential classification allows wide range of living accommodations, ranging from conventional single-family units to mobile homes. Building intensity at the lower end of the density range would be appropriate adjacent to lower density residential areas. Housing types at the lower end of the density range still would be characterized primarily by detached housing units, patio homes, and zero-lot-line projects. Building intensity at the higher end of the range is more appropriate adjacent to parks and other open spaces, along transit routes and major and secondary thoroughfares, and near recreational activity centers, libraries, shopping centers, and entertainment areas. Development at this level of intensity normally would be semidetached or attached units, and include duplexes, triplexes, fourplexes and garden apartments.

Medium Density serves as a buffer between low density residential areas and areas of higher density, commercial activities with greater traffic and noise levels.

- e. **High Density.** (up to 18 dwelling units per gross acre). This residential category is typified by low-rise townhouses and apartment buildings. This density is appropriate close to major community facilities and employment opportunities, and along major thoroughfares. This high-density residential category may be used as buffer between commercial activities and lower density residential areas.

It should be used generally adjacent to commercial areas. Typical projects at this density can be found along Highway 202 and Tucker Road.

2. POLICIES REGARDING RESIDENTIAL PRESERVATION AND DEVELOPMENT

Residential neighborhoods shall be protected from the encroachment of incompatible activities or land uses such as heavy service commercial businesses, which may have a negative impact on the residential living environment

In the design of both Rural designations and of Estate. The single-family residential development, consideration should be given to public improvement standards which allow for a more rural environment, such as flexibility in street rights of-way, increased setbacks and pedestrian circulation systems such as trails or paths, provided health and safety is not compromised.

Mobile home parks should be given particular attention to ensure that building and safety regulations are continually met and that the mobile home parks are well maintained.

Additionally, criteria will be developed to evaluate the conversion of mobile home parks to ownership.

A Land Use Area Plan will be developed for the residential areas generally located between the Tehachapi Airport and "C" Street and Snyder and Mill Streets. The neighborhood is predominately characterized by older single and multifamily housing stock. The area plan shall address the following objectives:

a. Orientation towards pedestrian activities:

The improvement of area streetscapes to provide, at a minimum, streetlights and continuous sidewalks.

b. Preservation & the single-family residential character:

Introduction of zoning that discourages demolition of single-family dwellings that are subsequently replaced by high-density multifamily units.

c. Preservation of historic/cultural resources:

Consideration of a conservation district that would provide guidelines for protecting the historical/cultural resources in the area through design and development standards,

d. Integration with Downtown Specific Plan:

Development guidelines that require uses that will complement the area that border the neighborhood and provide a transition between the single-family residential core and commercial uses.

e. Implementation measures such as overlay zones, design guidelines and incentive programs for revitalization, rehabilitation and preservation.

3. POLICIES REGARDING ECONOMIC DEVELOPMENT

Tehachapi shall promote its position as an economic center of the Greater Tehachapi Area through policies intended to sustain its regional and sub-regional commercial center; to revitalize the Downtown area, non-regional retail areas, and older industrial uses; and to promote high-quality industrial development.

The City will encourage economic activities to expand or locate in Tehachapi that:

- a. Are clean and nonpolluting.
- b. Will provide high-quality employment opportunities.
- c. Will reduce the need for Tehachapi residents to commute out of the area.
- d. Will maintain the City's fiscal stability.
- e. Are aesthetically superior.

The City should strive to develop a diversified economy to provide jobs for Tehachapi residents of all ages and skill levels and to cushion the City's economy against a downturn in any one Sector and against seasonal fluctuations.

The City shall strive to achieve a desirable employment to housing ratio (also known as job/housing ballance) of 1:1.1.

The downtown shall continue to be revitalized by upgrading its appearance and achieving a coordinated land use pattern, including retail, offices, visitor-serving activities and residential development.

The City shall evaluate its stock of motel, hotel and visitor-serving uses to accommodate all types of travel, including business-related and family-oriented trips, as determined to be economically viable.

The City shall initiate programs for revitalization of its existing industrial area and commercial areas to attain greater economic stability through the implementation of Land Use Area Plans.

4. **POLICIES REGARDING COMMERCIAL DEVELOPMENT**

Three commercial land uses are established to meet the City's need for retail and assorted services. These commercial land uses are designated on the Land Use Plan and include Neighborhood, Village and Community. In order to indicate generally how intensely the various commercial areas should be developed, zoning districts with the desired character have been identified.

- a. **Neighborhood Commercial** - Planned Neighborhood Commercial includes convenience commercial uses that provide retail goods and services to residents in the immediate vicinity. The facilities may be freestanding or in small clusters on sites with an acre maximum size. Planned Neighborhood Commercial uses may be separated by at least one (1) mile from any other commercial center or zone. This designation is permitted in every land use category including large Specific Planning Areas (SPA). However, since the facilities are intended to serve the immediate neighborhoods, it may not be an appropriate use in many residential or industrial areas.

Planned Neighborhood Commercial uses shall be within a convenient walking and/or bicycling distance from intended customers and shall be linked with surrounding neighborhoods by pedestrian and/or bicycle access. A landscape buffer shall be established around the project site between Neighborhood Commercial uses and other uses to ensure compatibility. Buffers shall include distance, plant matter and intensity, landforms or some other combination of the above. Landscape plans, traffic studies, and market analysis may be required. All buildings shall be low-rise and shall include architectural / design features, which will be compatible with the neighborhood. Permitted uses and building intensities shall be compatible with surrounding land uses. Childcare facilities are permitted in the Neighborhood Commercial designation. Planned Development procedures shall be used to establish Planned Neighborhood Commercial projects.

- b. **Village Commercial** - This land use designation is intended to allow a variety of commercial activities within a self-contained, comprehensively planned commercial center. Appropriate uses with the Village Commercial designation may include office and professional uses, tourist serving facilities, specialty retail, and other retail/service businesses. Key locations within the City's boundaries, such as gateways to the City intersection of major roadways and in

areas proposed for hotel/motel development, are designated as Village Commercial.

Development plans for Village Commercial areas shall address, at a minimum, the following issues: locations of all buildings, including orientation for light and with intensity of development; height, scale and architectural design features; signage; buffers; landscaping; circulation and parking patterns; market analysis; and open space. Areas designated for Village Commercial uses are shown on the Land Use Map. Individual areas may have site specific requirements, which are designed to preserve its unique qualities, and to ensure compatibility with existing and surrounding land uses.

- c. **Community Commercial** - The General Commercial category is characterized by a broad range of retail and service activities. It includes local commercial, large-scale shopping/office complexes, and regional shopping centers. Appropriate uses include personal and business retail service, automobile sales and service, eating and drinking establishments, and heavy service commercial. In Community Commercial areas, building intensities should be typical of development permitted under the general commercial zoning. Building heights shall generally be low-profile, although taller structures may be permitted where tourist-serving facilities or mixed uses are proposed. All areas proposing General Commercial uses shall provide details regarding location, intensity, height, and scale of the proposed development, landscaping, circulation, architecture and design, and signage.

For the downtown, south of the State Route 58, the City will develop and adopt programs and/or ordinances directed at strengthening and rehabilitating existing commercial and residential areas. The program will include implementation of Land Use Area Plan for the townsite area.

For areas along Tucker Road, Dennison Road and Mill Street interchanges, with State Route 58, commercial development shall be expected to areas and act as community high volume centers needing freeway access and visibility, but only if compatible with surrounding land uses.

Prior to or concurrent with submittal of development plans, all new commercial development over two acres may be required to submit a study to the City which shall include, but not be limited to, a study of the existing and/or approved commercial development in the vicinity, existing vacancy rates for similar commercial uses, and other

information, as deemed necessary by the City. This policy is intended to avoid potential blight in existing commercial areas.

Future commercial activities shall be designed and organized into planned, group concentrations as opposed to commercial activities organized in a linear fashion.

Neighborhood Commercial centers shall be a maximum of two (2) acres and shall be located in such a way as to compliment but not conflict with adjoining residential areas, This shall be accomplished by:

- a. Limiting such facilities to one corner of an intersection where at least one of the streets is classified as arterial street in the Circulation Plan.
- b. Limiting their number so that they are at least one-half mile from another commercial center.
- c. Controlling lights, signage and hours of operation to avoid adversely affecting surrounding uses.
- d. Requiring adequate landscaped buffers between commercial and residential uses.
- e. Providing bicycle and pedestrian links between planned neighborhood commercial centers and surrounding residential areas.
- f. Prohibiting the dispensing of motor fuels.

Neighborhood commercial centers shall be designed to promote their role as a neighborhood activity center. Accordingly, community meeting rooms, exhibition spaces, cultural facilities, childcare, and other cultural/educational functions shall be appropriate uses in and; adjacent to shopping centers.

Commercial activities shall be located and designed to benefit from the access afforded by circulation system without impairing the operation of this system. To accomplish this, the City shall:

- a. Require a traffic and circulation study for all commercial development over five acres or smaller centers, if necessary, as determined by the City Planner.

- b. Prohibit points of access if they are too close to intersections and will result in unacceptable congestion or in safety hazards as determined by City staff.
- c. Limit the number of access points and curb cuts to maintain efficient traffic operations.

The City shall adopt policies or standards addressing drive-through commercial facilities. Quantification and possible reduction of air quality traffic safety, and visual impacts shall be considered prior to approval of drive-through facilities.

5. POLICIES REGARDING INDUSTRIAL DEVELOPMENT

Two (2) categories of industrial land uses shall be established to accommodate the need for industrial uses: Light Industrial and Heavy Industrial.

- a. **Light Industrial** - Light Industrial developments are planned, grouped concentrations of industrial and research and development activities. They typically do not involve the outdoor activities associated with manufacturing operations. Plans within light industrial areas along the freeway corridors and adjacent to Downtown shall be prepared to encourage economic vitality and to improve aesthetic values. These plans shall address landscaping, design, signage, infrastructure improvements, lot consolidation incentives, code enforcement program, and recycling of buildings. Plans will be implemented through application of site plan approvals, overlay zone or through limited zone changes. Building character and scale shall take into account the sensitive nature, of the surrounding residential areas.
 - 1. The highly visible corridor along State Highway 58 meets the requirements of the light Industrial designation based on the preparation of an area plan. These area plans may include provisions for mixed uses, aviation easements, buffers, and design standards to improve the aesthetic and economic environment.
 - 2. The older industrial areas north of railroad tracts and around the airport, Mill and Hayes Streets, shall address recycling of existing uses and buildings, buffering well-established industrial uses, and allow office and commercial uses compatible with residential activities to expand.

3. Plans will consider land use incentives for lot consolidation and recycling of unattractive, under utilized or potentially hazardous uses.
4. Implementation of an area plan shall address public improvements such as the widening of Mill and other streets and the reuse of the apple sheds and railroad right-of-way.

- b. **Heavy Industrial** - The Heavy Industrial land use permits a range of industrial activities including manufacturing, wholesale, heavy commercial and office uses. Manufacturing and assembling activities are to be conducted entirely within closed uses. Building intensities should be typical of development under the City's right Manufacturing (M-1) or General Manufacturing (M-2) zoning. Building heights should generally be low-rise (3 stories or 45 feet maximum).

The City shall adopt development standards for Light Industrial uses. Plans shall be prepared for development within the corridor areas cited above.

The City shall not allow new industrial land uses which produce vibration, noise, glare, heat, and/or pollution, and/or other environmental impact at levels that adversely affect surrounding land uses. Performance standards for each industrial land use shall be developed.

Industrial development shall incorporate measures such as building orientation, fencing or screening, avigation easements requirements access control, and noise reduction techniques to avoid negative impacts on adjacent land uses.

The City shall encourage development of existing industrial areas shown on the Land Use Plan and revitalization of the existing older and underutilized industrial areas.

Industrial areas should be protected from encroachment by other land, uses that would diminish the supply of available industrial land in the City, except in limited circumstances where commercial or retail services are clearly intended to serve industrial uses.

6. **POLICIES REGARDING PUBLIC LAND USE CATEGORIES**

A **PUBLIC** category shall be used to identify existing large publicly-owned lands, waste water treatment facilities, dams, airports, and other

governmental structures other than schools, where such uses occupy more than two acres. The most prevalent open spaces are parks and City watershed areas. Any proposed land use change in this category shall conform to the surrounding land uses with respect to type of activity and intensity of development.

Tehachapi shall encourage the preservation of lands within the Planning Area that are owned by other public agencies for use as undeveloped open space, recreational purposes or mitigation banking.

If the land used for recreational purposes or undeveloped open space within the Planning Area which is owned by another public agency becomes available for acquisition, the City retain it in its current use for possible mitigation banking purposes or to develop as additional recreational opportunities.

7. SPECIFIC PLANNING AREAS CATEGORIES

Specific Planning Areas are intended for areas which require submittal of specific plans prior to development, as described in California Government Code Sections 65450 through 65507. In Chapter III, Specific Planning Areas, each Specific Planning Area is described in terms of its location, intended land use and building intensity, and development concept.

The application of the Specific Planning Areas is not limited to those shown on the Land Use Plan. Additional areas may be defined by the City or can be requested by landowners/property owners. If a new Specific Planning Area is proposed, its approval shall require designation on the Land Use Plan and text appended to Chapter III, Specific Planning Areas, defining the location of the intended development, proposed land uses and intensities, and pertinent conditions or restrictions on development and demonstration of how the proposed SPA furthers the goals and objectives of the General Plan more effectively than existing designations.

III. SPECIFIC PLAN AREA

A. Not as yet prepared

IV. IMPLEMENTATION (*Revised March 19, 1996*)

A. INTRODUCTION

The General Plan establishes the goals and policies, which guide the development within the City of Tehachapi; however, it does not specifically explain how the goals and policies are to be implemented.

Policies in the Land Use Element and other applicable elements must be referenced in conjunction with implementation policies.

B. ZONING ORDINANCE

As a result of new General Plan land use designations, of all properties are consistent zoning. Government Code 658E0 requires that city zoning ordinances shall be consistent with the adopted General Plan, Provisions are made in the state law to allow a city reasonable time to amend its zoning ordinance to be consistent when amendments are made to its General Plan if they are not.

1. POLICIES REGARDING THE PERMANENT ZONING ORDINANCE

The development standards and regulations found in the existing City zoning categories serve as a guide when comparing the General Plan designations. Existing zoning may be able to adequately implement the- General Plan with some modifications, New zoning categories and residential densities shall be considered in areas where the City's existing zoning will not adequately implement the goals and objectives of the General Plan.

2. Districts Existing City Zoning	Dist (C-4)
Ag Dist (A)	Light Indust
Estate Dist (E)	Dist (M-1)
Low-Dens (SFR)	Heavy Indust
Dist (R-1)	Dist (M-2)
Med-Dens (MFF)	* Depends on density
Dist (R-2)	
High-Dens (MFR)	
Dist (R-3)	
Mbl Home Park	
Dist (M-P)	
Mbl Home Sub Div	
Dist (M-S)	
Res and Prof	
Dist (R-P)	
Neighborhood	
Comm Dist (C-1)	
Central Comm	
Dist (C-2)	
General Comm	
Dist (C-3)	
Hwy Comm	

General Plan Designations

Density

	N/A
	Village
Agricultural	Community Comm
Estate	Community Comm
Neighborhood	Light Industry
Med. Density	Heavy Industry
High Density	
Neighborhood/Medium*	
Neighborhood High	

The City shall update and revise the zoning and subdivision ordinances to reflect the goals, objectives and policies in the adopted General Plan. Implementation of these revisions will require adequate time to perform detailed analysts and studies to meet this goal.

Zoning overlays may be considered within land use area plans to further advance General Plan policies and City programs especially with Land Use Area Plans affecting City owned property and revitalization areas like the Airport and downtown.

An ordinance or resolution shall be adopted which provides detailed and uniform methods of calculating density for residential projects.

C. DEVELOPMENT REVIEW PROCESS

The City's development Site Plan review process involves the examination of development proposals for their conformance with City policies, standards and regulations as well as adequacy of public facilities, Facilities Plans, Capital Improvements Program and other financing mechanisms. Through the active participation of several City departments, this process has the most direct influence on the City's ability to carry out the primary development goals and policies of the General Plan. Key components of the development review process include: Conventional Zoning Subdivisions, Specific Plans, Environmental Review, and Permit Review.

1. POLICIES REGARDING ZONING DESIGNATIONS

The City shall evaluate current zoning designations to determine adequacy for implementing new General Plan policies. New designations may be established.

Zoning applied throughout the City in consideration of the surrounding zoning pattern of the area to ensure compatibility, and consistency with the land use designations.

Locational and operational characteristics shall be considered when establishing zoning designations to ensure appropriateness.

Criteria shall be established ensuring that zoning applied to an area will provide the opportunities to meet General Plan policies and standards such as community facilities, housing, and open space.

2. POLICIES REGARDING SUBDIVISIONS

Site design considerations for subdivisions shall include the limitation of two-story dwelling unit within a development to avoid adverse streetscapes and visual impacts.

The City shall consider increasing and/or establishing subdivision and/or design standards for street trees, street design features, floor area ratios, height, bulk, and separation.

The City shall review its street and public works requirements and identify circumstances where these requirements could be modified in the Rural and Estate land use categories.

Subdivisions should avoid the use of panhandle lots and unusual lot slopes except to preserve slopes, ridgelines, habitat areas, and other resources identified in the Open Space/Conservation Elements.

In conjunction with an evaluation by the City of development proposals, applicants shall provide documentation of the Gas Company's ability to serve the project. Such documentation shall include a description by the Gas Company of existing and proposed utility easements needed to serve the project and its estimation of additional requirements needed to offset the additional demand of the project.

3. POLICIES REGARDING PLANNED DEVELOPMENT ZONING

Planned Development zoning shall be used to address unique characteristics of a development site and the surrounding land uses to better implement the goals and policies of the General Plan.

Development proposals involving Planned Developments shall address and/or include, if applicable:

- a. Visual impacts of the development.
- b. Preservation of the natural setting minimizing earth movement and removal of native vegetation and by using compatible building materials, textures and colors.
- c. Grading, erosion control and re-vegetation/landscaping requirements.
- d. Preservation of the creeks and their adjoining vegetation in a natural state and the use of buffering techniques to control undesired access.
- e. Implementation of appropriate management techniques in areas of rare and endangered plant and animal species.
- f. Adequate buffers and separations from adjacent properties.
- g. Superlative architectural design features of all structures.
- h. Adequate separation between structures and attention to the bulk and scale to avoid a monotonous streetscape.
- i. Preservation/maintenance of common open space or community area.
- j. The Planned Development zoning ordinance may require further detailed information to achieve General Plan goals and objectives.
- k. Clustering residential units shall be permitted only in conjunction with a Planned Development or Specific Planning Areas (SPA) (see provisions for clustering).
- l. Planned Development zoning should be limited to projects of adequate size and unique physical characteristics to effectively implement the appropriate policies.

4. POLICIES REGARDING SPECIFIC PLANNING AREAS

Specific Planning Areas (SPA) shall be utilized to consider development proposals analyzing zoning regulations, development

standards, land uses, densities, building intensities tailored to the need and unique characteristics of a particular area. Generally, SPA should only be applied to larger areas and where community benefit can be demonstrated.

- a. Specific Plans shall not be utilized in a widespread manner to circumvent or modify the character or intent of ordinances, land use designations and/or City goals and objectives, but rather should be reserved for a limited number of proposals which, by nature, are ideally suited for the comprehensive planning efforts involved in the Specific Planning process.

Specific criteria to evaluate the suitability of a site shall be established which shall include:

1. The site should be of sufficiently large area to take advantage of density transfers where appropriate thereby preserving significant open space areas within the Specific Plan area.
 2. The site should have unique physical characteristics, such as uneven terrain or hillside areas that, without a Specific Plan, might not be effectively protected and incorporated into the overall development plan.
 3. The site should be of sufficient area that lends itself to a comprehensive site design utilizing a combination of attractive landscaping and open space amenities left in their natural condition.
 4. The site should be of sufficient area and nature that lends itself to long-term development phasing (e.g., in excess of five years) which can effectively be monitored and controlled.
 5. The site should require flexibility in planning to deal with compatibility with different surrounding land uses and extensive public improvements requirements.
- b. No specific Plan shall be adopted by the City Council until the Council has reviewed the proposed Plan for compliance with the following requirements which are in addition to

requirements imposed by State Government Code Sections 65450, et seq.:

1. Residential, industrial and commercial structures built within the Specific Plan area shall be constructed under, rigorous quality control programs and safeguards (e.g., appropriate restrictive covenants running with the land).
2. Appropriate protection against soil erosion, particularly where hillside development is involved, shall be assured.
3. Assurance shall be provided that any hillside cutting will be minimized or appropriately landscaped so that visible scaring will be mitigated to the extent feasible.
4. All open space areas shall be identified and appropriate measures providing for their preservation shall be included.
5. Design criteria, development regulations and building standards shall be provided sufficient to ensure that residential, industrial and commercial structures are compatible with the surrounding environment.
6. Adequate assurance shall be provided that the circulation and access needs of the project residents and the surrounding community are properly addressed.
7. Appropriate arrangements to ensure that public facilities and services adequate to serve the project residents are available shall be described.
8. The Specific Plan demonstrates implementation of the goal and objectives of the General Plan and furthers the interests of the community.

Clustering residential units shall be permitted only in conjunction with a Planned Development or Specific Planning Area (SPA) (see provisions for clustering).

5. POLICIES REGARDING ENVIRONMENTAL REVIEW

The City shall maintain its Environmental Quality Regulations in accordance with the California Environmental Quality Act, which requires environmental review of projects (public and private), including analysis and mitigation of on and off-site impacts, as defined by CEQA.

Environmental review for specific projects shall be accompanied by sufficient technical data to determine consistency with General Plan policies related to the physical environment including, but not limited to; traffic, biology, air quality, noise, drainage, archaeological sensitivity, visual impacts, geotechnical and public facilities and services. This policy shall particularly apply in areas of sensitivity and constrained lands as identified in the Open Space Concept.

Mitigation measures specified in the General Plan Environmental Impact Report shall be applied for proposed development throughout the Planning Area.

Thresholds of Significance and special/sensitive areas shall be periodically reviewed and updated, as more specific and recent information becomes available.

The Tehachapi Public Works Department/City Engineer shall advise the utility companies which may have services in subject public rights-of-ways of street construction or reconstruction projects during their design phase; and Tehachapi shall cooperate with the service providers to provide data needed to estimate future demand of services.

6. POLICIES REGARDING SITE PLAN APPROVAL

The City shall review its guidelines and procedures for development to conform with the General Plan recommendations, Facilities Plans, Capital Improvements Plans and Development Standards.

Areas within environmentally sensitive areas, the City shall consider the location, extent and quality of the resource and appropriate mitigation measures.

The City shall review for consistency, the Guidelines for Grading design with the General Plan policies and make necessary modifications.

The project description including the Site or Plot plan should identify building materials, activities and lighting.

D. SPECIAL IMPLEMENTATION TECHNIQUES

The General Plan establishes the rationale, goals, objectives, and policies for future actions within the community. However, since areas of the community differ in characteristic, topography, development potential, and intensity, special implementation programs provide a means to carry out certain objectives of the General Plan, which will benefit the community. These special implementation techniques include clustering, open space management, development agreements and financing options.

1. POLICIES REGARDING CLUSTERING

Clustering is useful when trying to protect sensitive natural resources, avoid hazardous areas, or preserve the natural appearance of an area. Clustering involves assessing the natural characteristics of a site and grouping the buildings or lots through an on-site transfer of density rather than distributing them evenly throughout the project as in a conventional subdivision. Not only do cluster developments help preserve open space, they also tend to minimize the visual impacts associated with development, reduce cost of building and maintaining public road, and decrease grading in environmentally sensitive areas. In general, sites less than five acres are too small to benefit from the clustering concept.

The maximum development yield (that is, the number of dwelling units} that can be built as part of a clustered development project shall be derived by applying the maximum permissible density in each applicable residential land use category, subject to applicable slope density categories adjusted for natural floodways.

The number of dwelling units actually permitted for development in a cluster development may be less following application of the following provisions that shall govern cluster development projects.

The provisions for clustering units shall be utilized only within Planned Development Zones or Specific Planning Areas.

Clustering is not intended to maximize the density or yield, or to circumvent the existing zoning. It shall be utilized as a tool to preserve slopes, ridgelines and sensitive habitat or provide a community benefit.

Under the clustering provision, lot widths, building separations and setbacks, and unit bulk, shall be consistent and compatible with the zone in which it is proposed.

When clustering, the portion of the site to be developed for residential purposes shall not significantly change the character of the surrounding area.

When utilizing cluster provisions, a project shall not have an adverse visual impact on the surrounding areas by blocking scenic views, by resulting in a scale of development incompatible with the setting, by siting buildings that project above the ridgeline, or by extensive grading, cutting and filling, or by terracing that disrupts the natural shape and contour of the site.

Cluster developments shall not increase geotechnical and flooding hazards for adjoining properties.

Lands devoted to permanent open space should not be developed with structural uses other than agricultural accessory buildings. Uses should be restricted to agriculture; historic, archaeological, or wildlife preserve; water storage or recharge area; leach field or spray disposal area; scenic areas; protection from hazardous area; or public outdoor recreation.

2. POLICIES REGARDING DEVELOPMENT AGREEMENTS

Development agreements allow the City to enter into a contract with a developer in which the City effectively promises not to change its planning or zoning laws applicable to the development for a specified period of time. In return, the developer would commit to construct specific improvements, provide public facilities and/or services, develop according to a specified time schedule or make other commitments, which the City ordinarily cannot require of the developer.

Development Agreements may be permitted to correct and finance facility deficiencies that can be upgraded by a developer in consideration for a development commencing construction prior to the availability of capacity in existing facilities.

Development Agreements for residential projects shall specify the number of building permits to be allocated and correlated with facilities and/or financing for on-site or off-site community benefit.

The City shall evaluate the duration of Development Agreements so as not to impair the response to community concerns and needs that change over time.

3. POLICIES REGARDING FINANCING OPTIONS

New growth and development add to the service and facility requirements of the City and other public agencies. Additional demand for ongoing services are financed by the operating revenues paid by new as well as existing development. However, the fiscal burden of these facilities is beyond the capacity of normal municipal revenues. In recognition of this fact, the utilities, growth management and public facilities policies state that the capital and facility needs generated by new development should be financed by new development.

- a. The City will develop a comprehensive backbone facilities plan to implement the urban services standards and policies of the General Plan. Public facilities to be addressed in this plan include, but not limited to fire, roadways, parks, open space, water, sewer, drainage and other similar facilities outlined in the Quality of Life Standards. The plan shall include:
 1. Projections of capital improvement costs necessary to implement the urban service standards contained in the adopted General Plan.
 2. Projections of revenues, including development fees, which will be available to meet capital improvement needs.
 3. Identification of necessary adjustments to fees and other revenue sources to meet projected capital improvement needs.
 4. Identification of long-term financing methods to allow for the construction of needed public improvements in a timely manner, based on projected growth and public service demands.

This plan shall be reviewed and updated periodically in order to assure that development fees and other revenue sources are adequate to meet the objectives of the General Plan.

At least every five years a comprehensive review of the financial portion of the facilities plan shall be undertaken in conjunction with the update of the General Plan. This review will include a review of services standards and policies, and revised capital improvement cost projections based on any revised standards. The review shall also consider the costs of any new services or facilities being provided by the City and other public agencies affected by the General Plan,

- b. The following potential revenue and financing mechanisms available to meet capital improvement needs, should be examined by the City to meet community facilities' and services needs:
 - 1. New development required to construct and dedicate to the City all public improvements directly attributable to the site. This includes sewer extensions, sewer laterals, street improvements, sidewalks, street lighting, fire hydrants, and the like.
 - 2. Traffic impact fees collected and adjusted sufficiently to fund the improvements necessary to serve new development. Periodic adjustments based on costs, and identification of needs, shall be considered in this fee adjustment.
 - 3. Park fees adjusted sufficiently to fund the acquisition and improvement of local parks, community centers, and other specialized recreational facilities in accordance with the adopted acreage-to-population ratio as required to offset impacts of new development.
 - 4. Water connection fees adjusted sufficiently to fund improvements required in the Water Master Plan.
 - 5. Sewer connection fees adjusted sufficiently to fund improvements required in the Wastewater Master Plan.

6. Drainage master plan delineating drainage basins in order to anticipate and fund storm drain improvements.

ENVIRONMENTAL INFORMATION FORM
(To Be Completed By Applicant)

Date Filed 04/06/96

General Information

1. Name and address of developer or project sponsor: City of Tehachapi, 115 South Robinson Street, P.O. Box 668, Tehachapi, California 93581
2. Address of project: N/A General Plan Amendment
Assessor's Block and Lot Number: _____
3. Name, address, and telephone number of person to contacted concerning this project: Darrell V. Daugherty, City Manager, 115 South Robinson Street, P.O. Box 668, Tehachapi, California 93581
4. Indicate number of the permit application for the project to which this form pertains: General Plan Amendment
5. List and describe any other related permits and other public approvals required for this project, including those required by city, regional, state and federal agencies: None
6. Existing zoning district: N/A
7. Proposed use of site (Project for which this form is filed: General Plan Boundary (all parcels)

Project Description: **SEE ATTACHED EXHIBIT "A"**

The General Plan boundary of the City, about 18.0 square miles.

8. If commercial, indicate the type, whether neighborhood, city or regionally oriented, square footage of sales area, and loading facilities. N/A
9. If industrial, indicate type, estimated employment per shift, and loading facilities. N/A
10. If institutional, indicate the major function, estimated employment per shift, estimated occupancy, loading facilities, and community benefits to be derived from the project. N/A
11. If the project involves a General Plan Amendment variance, conditional use or rezoning application, state this and indicate clearly why the application is required. _____

Are the following items applicable to the project or its effects? Discuss below all items checked yes (attach additional sheets as necessary).

	YES	NO
12. Change in existing features of any bays, tidelands, beaches, or hills, or substantial alteration of ground contours.	___	<u>X</u>
13. Change in scenic views of vistas from existing residential areas or public lands or roads.	___	<u>X</u>
14. Change in pattern, scale or character of general area of project.	___	<u>X</u>
15. Significant amounts of solid waste or litter.	___	<u>X</u>
16. Change in dust, ash, smoke, fumes or odors in vicinity.	___	<u>X</u>
17. Change in ocean, bay, lake, stream or ground water quality or quantity, or alteration of existing drainage patterns.	___	<u>X</u>
18. Substantial change in existing noise or vibration levels in the vicinity.	___	<u>X</u>
19. Site on filled land or on slope of 10 percent or more.	___	<u>X</u>
20. Use of disposal of potentially hazardous materials, such as toxic substances, flammables or explosives.	___	<u>X</u>
21. Substantial change in demand for municipal services, (police, fire, water, sewage, etc.).	___	<u>X</u>
22. Substantially increase fossil fuel consumption (electricity, oil, natural gas, etc.).	___	<u>X</u>
23. Relationship to a larger project or series of projects.	___	<u>X</u>

Environmental Setting

24. Describe the project including information on topography, soil stability, plants and animals, and any cultural, historical or scenic aspects. **SEE ATTACHED EXHIBIT "B"**
25. Describe City setting and the surroundings, including information on plants and animals and any cultural, historical or scenic aspects. Indicate the type of land use (residential, commercial, etc.), intensity of land use (one-family, apartment houses, shops, department stores, etc.).

SEE ATTACHED EXHIBIT "C"

Certification

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

4-16-96

Date

Daniel Damperty

Signature

For City of Tehachapi

(Note: This is only a suggested form. Public agencies are free to devise their own format for initial studies.)

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EXHIBIT "A"

PROJECT DESCRIPTION

The discussion of environmental effects is intended to address the scope of the project. This includes updating amendment of the City of Tehachapi General Plan. A variety of land uses are proposed within the Tehachapi General Plan area. This Initial Study will consider the cumulative effects in a comprehensive manner not otherwise possible if individual project components were reviewed independently under California Environmental Quality Act (CEQA) requirements. Analysis of basic land uses with City policy considerations will render greater compliance with City requirements on future development applications.

Subject to CEQA Guidelines, an Initial Study is appropriate where a series of actions is characterized as one large project and the actions are related geographically, are logical parts in the chain of contemplated actions, or as individual activities carried out under the same authorizing regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.

The objective of the proposed project is to update the Land Use Element elements of the Tehachapi General Plan and expand the boundaries of the planning area to encompass the Sphere of Influence. The project area contains a total of approximately 49,000 acres which are located in the Tehachapi Valley and surrounding mountains.

There very few changes in the land use designations. The work is primarily designed to accommodate graphical and language modifications. The density should actually be reduced because of the less dense zoning in multiple categories and larger lot sizes in the R-1-8 districts. Hence, density and growth impacts are minimized.

More specifically, the primary planning area of the proposed General Plan project area is located within T32S, R33E, Mount Diablo Base and Meridian. The boundary of the overall planning area boundary site is irregular in shape and encompasses the majority of the Tehachapi Valley and surrounding mountains.

The site contains an elevational range from 3,540 feet at the lower northern end of Tehachapi Creek Canyon at the northwest corner of the planning area to 7600 feet at the southern boundaries of the project area.

The overall objective of the General Plan Update project is to establish land use designations. The proposed land uses will consist of commercial, residential, recreational, agricultural

EXHIBIT "A"

and public uses. Phasing is seen as an important aspect of the Land Use Element. The phases and timing of development is subject to market characteristics, land owner programming and legislative actions of the City and the budgetary constraints of the City, County, State and special districts.

This program Initial Study attempts to incorporate the previously prepared Environmental Impact Reports of the City, County and other local government agencies. The Environmental Impact Reports and Environmental Impact Statements utilized for this review are listed as follows:

- Old Town Specific Plan EIR SCH # 82122408
- Golden Hills Specific Plan EIR SCH #
- GPA for Valley & Tucker 1982 SCH # 81122457
- GPA Project AREas I & II 1988 SCH # 87122104
- Nunes Pear Orchard EIR SCH # 81110556
- Tehachapi West EIR SCH #
- Tehachapi Municipal Airport EIR SCH # 87122103
- North Tehachapi Development EIR SCH #
- Loop Ranch Program EIR SCH # 89020246
- Keene & Broome Ranch EIR SCH # 80061824
- Wastewater Treatment Expansion EIR SCH # 90020230
- Mendiburu Springs Specific Plan EIR SCH # 91122018
- Tehachapi Watershed Project EIR 1980

Each of these previous EIRs included various studies including cultural resource, biological, acoustical, traffic, hydrological, geotechnical and similar studies and included mitigation measures to reduce environmental impacts. This EIR incorporates these studies and mitigation measures for reference and environmental protection. In certain cases this document extrapolates impacts and develops regional mitigation measures. This is the case primarily with acoustical studies and traffic studies. Map 3 identifies those areas that have previously had an EIR completed. Additional maps are referenced in individual sections of this EIR that identify areas of focused study of biological, cultural and similar resources.

The City may require supplemental environmental analysis of specific issues if adequate information is not on file or mitigation is not adequately incorporated into future developments. In certain cases developers have submitted detailed studies to the City to be incorporated in this EIR in an effort to streamline future project planning and approval.

CULTURAL RESOURCES

The Tehachapi vicinity appears to have been inhabited by the aboriginal Kawaiisu Indians and possibly by the Kitanemuk Indians. Both groups were Shoshonean speaking and shared similar life styles. These groups were regionally migratory, moving through the territories as necessary to obtain essential water and food resources and in response to climatic changes. Typically, group sizes were small and temporary villages or communities were limited to between fifteen and seventy individuals.

The principal resources offered by the Tehachapi vicinity were a large supply of acorns and a limited number of game animals. Most archaeological sites found in the general vicinity consistently show signs of acorn milling. The apparent use of the vicinity for gathering acorns indicates use was concentrated in the late summer and fall when acorn crops are mature. Hunting probably occurred on an occasional basis. The predominance of mill sites in the known local cultural resources, as compared to hunting blinds or clipped tools, supports the premise that Kawaiisu concentrated on acorn gathering in the area.

Archaeological investigations over the past few years have identified archaeological sites within the Tehachapi area. Recent studies (1988) identified twelve archaeological sites on 1,600 acres of land proposed for annexation and subsequent development within the City of Tehachapi.

In 1854, settlers began opening up the valleys to farming and ranching operations. The City of Tehachapi, which was incorporated in 1909, is the product of the 1876 linkage of the San Joaquin Valley with the Pueblo of Los Angeles by rail line leading over the mountain summit and through the Tehachapi, then dropping into the Mojave Desert.

With construction of the rail service, the area's early economy was strengthened by the development of mining operations that included gold, cinnabar, limestone and potash. The rail service also made it possible for Tehachapi's farmers to expand the market for their fruits and vegetables beyond the valley's confines.

Today, the Tehachapi area includes the City of Tehachapi, Old Town/Golden Hills, Bear Valley Springs and Stallion Springs. Rural communities in the region include Alpine Forest Park, Caliente, Cameron Canyon, Cummings Valley, Hart Flat, Keene and Sand Canyon.

Although urban development is rapidly transforming this rural mountain area, approximately 4,000 acres of irrigated agricultural land remain in active production.

DESCRIPTION OF ENVIRONMENTAL SETTING

EARTH

The implementation of the General Plan will alter existing ground features. Alterations will include grading for new construction, compaction of soil, import and export of fill dirt and increased soil disturbance. Increased soil erosion can be expected from both wind and water in areas where erosion control is not implemented. Continued development and resulting population increases will result in more people being exposed to seismic hazards including earthquakes on the Garlock and White Wolf faults. Potential exists for conflict between mining operations and proposed development.

Minerals

Limestone is the major commercial mineral resource in the Tehachapi area. Since 1921, the Monolith Portland Cement Company, and the successor, Calaveras Cement Company, east of the current City Limits, has quarried the limestone for cement manufacturing. The quarry has an estimated life of 100 more years of productivity. Smaller deposits of limestone are located on the south side of the planning area on the Summit Lime Company lands.

Other minerals found in the mountains surrounding the project area include gold, tungsten, mercury, uranium, zinc, and silver. These materials are not presently mined on a large scale.

Soils

There are a total of eleven soil types in the central planning area. The predominant soils are Tehachapi sandy loam, Havalala Sandy Loam, and Steuber Sandy Loam. There are also large areas of Xerothents, and Walong sandy loam. All of these soils except for the Walong soils were formed in alluvium derived from granitic rock. Walong soils formed in residual material weathered from granite.

Tehachapi sandy loam and Tehachapi Variant sandy clay loam are very deep and well drained soils. They occur on alluvial fans and terraces. The predominant vegetation for these soils are annual grasses and scattered hardwoods. The Tehachapi soil is also vegetated with a few perennial grasses and the Tehachapi Variant may support a few conifers.

The soils in the area exhibit various characteristics. The predominant Tehachapi soils are typified by slow percolation rates, moderate shrink-swell potentials and have moderate to very high water holding capacities. The remaining soils have

EXHIBIT "C"

low shrink-swell potential, have moderate to rapid run-off character and have slight to very high erosion potential. A complete description of soils characteristics is included in The USDA SCS Soil Survey which is included by reference.

Environmental Effects

Increased development of the Tehachapi area will result in increased demand for minerals and construction materials. Examples include concrete for construction and gravel for road materials. The potential for land use conflicts will increase as housing encroaches on mining operations.

Visual impacts associated with the continued mining of land in the Tehachapi Valley may have adverse or potentially significant effects on the aesthetics and hydrological characteristics of the area. In order to maintain the aesthetic value of the area and the related property values, strict adherence to the Surface Mining and Reclamation Act (SMARA) and CEQA should be required by the agency with jurisdiction over the project.

The soils that occur in the area have severe limitations to development due to shrink swell potential. Erosion hazards, blowing soil, and slow percolation rates of the soils also provide limitations to development.

During the grading and excavation phases of development, natural vegetation will be removed. This will expose the soil and increase the potential for wind erosion. Grading activity during periods of high wind could greatly intensify wind blown particulates into the atmosphere. This potentially significant effect on air quality, area residents and businesses must be addressed during grading and construction activities.

Geology/Seismicity

The Tehachapi Valley geologic system represents a series of intermediate elevation valleys which lie at the junction of the Sierra Nevada Mountains to the north and the Tehachapi Mountains to the south. Alluvial deposits dominate the valley floors. The City of Tehachapi is situated on sediments that are over 400 feet in depth.

Crystalline, igneous, and metamorphic rocks form the core of the Tehachapi Mountains. Tertiary sedimentary and volcanic rocks are exposed in the foothills. Acid igneous rocks of the granite family extend under the alluvium of the valley and occasionally protrude from the surface.

EXHIBIT "C"

The Tehachapi area is highly faulted. Major nearby faults include the Garlock Fault, approximately six miles southeast of the primary planning area boundary, and the White Wolf Fault, approximately 16 miles to the northwest. Other nearby faults include the Cache Creek and Phillips Ranch Faults to the northeast; Bear Mountain Fault to the northwest; and Tejon Canyon Fault to the southwest (see Map 5). The San Andreas Fault lies approximately 63 miles west of Tehachapi. The San Andreas Fault extends for approximately 600 miles and is considered capable of producing an earthquake in excess of 8.0 magnitude on the Richter scale.

	Yes	Maybe	No
c) Alterations to the course or flow of flood waters?	☐	☐	☒
d) Changes in the amount of surface water in any water body?	☐	☐	☒
e) Discharge into surface waters, or in any alteration of surface water quality, including, but not limited to, temperature, dissolved oxygen or turbidity?	☐	☐	☒
f) Alteration of the direction or rate of flow of ground waters?	☐	☐	☒
g) Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?	☐	☐	☒
h) Substantial reduction in the amount of water otherwise available for public water supplies?	☐	☐	☒
i) Exposure of people or property to water related hazards such as flooding or tidal waves?	☐	☐	☒

IV. PLANT LIFE. Will the proposal result in:

a) Change in the diversity of species, or number or any species of plants (including trees, shrubs, grass, crops, and aquatic plants)?	☐	☐	☒
b) Reduction of the numbers of any unique, rare, or endangered species of plants?	☐	☐	☒
c) Introduction of new species of plants into an area, or in a barrier to the normal replenishment of existing species?	☐	☐	☒
d) Reduction in acreage of any agricultural crop?	☐	☐	☒

SEE ATTACHED STATEMENTS

V. ANIMAL LIFE. Will the proposal result in:

a) Change in the diversity of species, or numbers of any species of animals (birds; land animals, including reptiles; fish and shellfish, benthic organisms or insects)?	☐	☐	☒
b) Reduction of the numbers of any unique, rare, or endangered species or animals?	☐	☐	☒
c) Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?	☐	☐	☒
d) Deterioration to existing fish or wildlife habitat?	☐	☐	☒

SEE ATTACHED STATEMENTS

VI. NOISE. Will the proposal result in:

a) Increases in existing noise levels?	☐	☐	☒
b) Exposure of people to severe noise levels?	☐	☐	☒

VII. LIGHT and GLARE. Will the proposal:

a) Produce new light or glare?	☐	☐	☒
--------------------------------	--------------------------	--------------------------	-------------------------------------

VIII. LAND USE. Will the proposal result in:

a) Substantial alteration of the present or planned land use of an area?	☐	☐	☒
--	--------------------------	--------------------------	-------------------------------------

IX. NATURAL RESOURCES. Will the proposal result in:

a) Increase in the rate of use of any natural resources?	☐	☐	☒
--	--------------------------	--------------------------	-------------------------------------

X. RISK OF UPSET. Will the proposal involve:

a) A risk of an explosion or the release of hazardous substances (including, but not limited to: oil, pesticides, chemicals or radiation) in the event of an accident or upset conditions?	☐	☐	☒
--	--------------------------	--------------------------	-------------------------------------

	<i>Yes</i>	<i>Maybe</i>	<i>No</i>
b) Possible interference with an emergency response plan or an emergency evacuation plan?	☐	☐	☒
XI. POPULATION. <i>Will the proposal:</i>			
a) Alter the location, distribution, density or growth rate of the human population of an area?	☐	☐	☒
XII. HOUSING. <i>Will the proposal:</i>			
a) Affect existing housing, or create a demand for additional housing?	☐	☐	☒
XIII. TRANSPORTATION/CIRCULATION. <i>Will the proposal result in:</i>			
a) Generation of substantial additional vehicular movement?	☐	☐	☒
b) Effects on existing parking facilities, or demand for new parking?	☐	☐	☒
c) Substantial impact upon existing transportation systems?	☐	☐	☒
d) Alterations to present patterns of circulation or movement of people and/or goods?	☐	☐	☒
e) Alterations to waterborne, rail or air traffic?	☐	☐	☒
f) Increase in traffic hazards to motor vehicles, bicyclists, or pedestrians?	☐	☐	☒
XIV. PUBLIC SERVICES. <i>Will the proposal have an effect upon, or result in a need for new or altered governmental services in any of the following areas:</i>			
a) Fire protection?	☐	☐	☒
b) Police protection?	☐	☐	☒
c) Schools?	☐	☐	☒
d) Parks or other recreational facilities?	☐	☐	☒
e) Maintenance of public facilities, including roads?	☐	☐	☒
f) Other governmental services?	☐	☐	☒
XV. ENERGY. <i>Will the proposal result in:</i>			
a) Use of substantial amounts of fuel or energy?	☐	☐	☒
b) Substantial increase in demand upon existing sources of energy, or require the development of new sources of energy?	☐	☐	☒
XVI. UTILITIES and SERVICE SYSTEMS. <i>Will the proposal result in a need for new systems, or substantial alterations to the following utilities:</i>			
a) Power or natural gas?	☐	☐	☒
b) Communications systems?	☐	☐	☒
c) Water?	☐	☐	☒
d) Sewer or septic tanks?	☐	☐	☒
e) Storm water drainage?	☐	☐	☒
f) Solid waste and disposal?	☐	☐	☒
XVII. HUMAN HEALTH. <i>Will the proposal result in:</i>			
a) Creation of any health hazard or potential health hazard (excluding mental health)?	☐	☐	☒
b) Exposure of people to potential health hazards?	☐	☐	☒

	Yes	Maybe	No
XVIII. AESTHETICS. Will the proposal result in:			
a) The obstruction of any scenic vista or view open to the public?	☐	☐	☒
b) The creation of an aesthetically offensive site open to public view?	☐	☐	☒
XIX. RECREATION. Will the proposal result in:			
a) Impact upon the quality or quantity of existing recreational opportunities?	☐	☐	☒
XX. CULTURAL RESOURCES. Will the proposal:			
a) Result in the alteration of or the destruction of a prehistoric or historic archaeological site?	☐	☐	☒
b) Result in adverse physical or aesthetic effects to a prehistoric or historic building, structure, or object?	☐	☐	☒
c) Have the potential to cause a physical change which would affect unique ethnic cultural values?	☐	☐	☒
d) Restrict existing religious or sacred uses within the potential impact area?	☐	☐	☒
XXI. MANDATORY FINDINGS OF SIGNIFICANCE.			
a) Potential to degrade: Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒
b) Short-term: Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one which occurs in a relatively, brief, definitive period of time. Long-term impacts will endure well into the future.)	☐	☐	☒
c) Cumulative: Does the project have impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect on the total of those impacts on the environment is significant.)	☐	☐	☒
d) Substantial adverse: Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒

XXII. DISCUSSION OF ENVIRONMENTAL EVALUATION.

(This section may be filled out by using narrative, or by using a form, such as the example given in the CEQA Guidelines.)

XXIII. DISCUSSION OF LAND USE IMPACTS.

(An examination of whether the project would be consistent with existing zoning, plans, and other applicable land use controls.)

(Note: This is only a suggested form pursuant to CEQA Guidelines, Section 15063(d). Public agencies are free to devise their own format for initial studies. However, the DETERMINATION is an essential component of this form.)

Revised December 1990

4-4-96

*was instructed
not to send this out
MD*

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PUBLIC

FACILITIES

ELEMENT

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I. INTRODUCTION STATEMENT

A. PURPOSE STATEMENT

The purpose of this Facilities Plan is to establish the framework for implementing the General Plan by considering municipal facility needs and fees to offset impacts of new development. This plan incorporates analyses contained in the Facility Master Plan Sections for water, sewer, streets and drainage. These Master Plans identify the ultimate facility needs for build-out of the General Plan and the intended levels of service.

For most future facilities, the developer installed improvements, the payment of development impact fees and capital budget funds are expected to be sufficient to offset the financial impacts of new development. In addition to private developers, the City will play a major role in insuring that the facilities are in place at the appropriate time through its capital improvement program. Some of these facilities may be required prior to the General Plan build-out and funding, and construction may need to be accelerated. For other facilities, critical improvements may be required before new development in specific locations will be allowed to proceed.

The objective of this General Plan Element is to implement a facilities management strategy to allow for the anticipation and the timely funding and construction of Municipal Services. The General Plan contains growth and economic development policies, which require the preparation of a long-range plan, projected over a 15 to 20 year time frame. It is intended that municipal facility requirements for each area of the City be evaluated and financing mechanisms be implemented to ensure that public services remain adequate to accommodate future needs. The General Plan boundaries as depicted in Exhibit I-I are the boundaries used to evaluate facility and service needs. Prior to the preparation of this document, several property owners and developers funded the preparation of special studies, Mello-Roos improvements and assessment district to develop infrastructure necessary to serve their projects.

During the time when these Mello-Roos/Assessment Districts and Impact Fees were being used to install municipal facilities, it became apparent that the City should provide a citywide plan. Most facilities could be analyzed more accurately and solutions to facility deficiencies could be better identified and costs spread more effectively on a citywide basis.

In the early 1990's, as the General plan was being up-dated, there was a relatively high rate of growth in the city particularly in the commercial sector as the residential sector reached the critical mass necessary to support a more regional based commercial sector. The provisions of public facilities planning to accommodate this growth was occurring on a piece meal project by project basis rather than in a comprehensive manner. As such public facilities planning was not keeping pace with development activity and service deficiencies resulted to the point where facilities were not available to accommodate new growth. Subsequently, with the

slower rate of growth, a new sewer treatment plant and the current economic downturn, the City had an opportunity to allocate resources towards rectifying the deficiencies. The number of critical infrastructure improvements required has been reduced by the combination of an aggressive construction program and slower population growth. The Capital Improvement Programs (CIP) for water, sewer, and streets, in particular, have been started. A Facilities required to accommodate new growth through the collection of impact fees and special districts will help scheduling. The Citywide Facilities Plan, once completed and adopted, will satisfy the General Plan requirements for the preparation of a development strategy having a facilities component.

B. CONTENT OF FACILITIES PLAN

This Citywide Facilities Plan contains a section addressing each public facility individually. For the first time, facility information has been comprehensively compiled in a single document. Facilities addressed include water, sewer, circulation and drainage.

Each facility section identifies the need for that facility, summarizes the overall plan for that facility, describes the existing condition of the facilities and describes requirements recommended for the approval of new development during the build-out of the General Plan. In addition, the plan describes an implementation program, including monitoring and reporting procedures, and identifies the recommended financing strategies for the proposed facilities. Each section also includes a comment which specifies any limitations on the approval of new development recommended in this Plan.

This Facilities Plan focuses on capital facilities, although included is a discussion of the relationship between the funding of operations and maintenance with providing adequate facilities to meet future Municipal Service Standards. Since the funding for operations and maintenance is part of the yearly budget process for the entire City, and is dependent on future costs and revenues, this component will be addressed on an annual basis. However, the funding of operations and maintenance is indirectly addressed by the implementation provisions for each facility which contains a monitoring and reporting procedure. The monitoring procedures will allow the City to track the condition of each facility, including operations and maintenance.

C. MUNICIPAL SERVICE GOALS AND OBJECTIVES

The Tehachapi City Council supports economic growth and development, but wishes to maintain high standards for providing municipal services. Planning for future growth and quality maintenance of existing municipal facilities is an objective requiring a consistently high level of funding commitment. This approach is usually achieved by developing a long range program designed to construct both new and replacement projects using scheduling and funding targets.

The goals and objectives in this section are more specific and will be implemented by Ordinances and project construction.

Goal 1: Evaluate existing municipal backbone facilities (water, sewer, streets and drainage) and determine adequacy for accommodating new growth.

Objectives:

- a. Determine existing facility capacities.
- b. Determine new facilities needs.
- c. Identify timing, location and costs for future needs.
- d. A finding shall be made by the Public Works Department that an adequate supply of potable water can be provided to serve the domestic and fire suppression needs of each proposed development prior to approval.
- e. Conditions of approval shall be implemented with each development to assure that the necessary water production, distribution and/or treatment facilities are in place prior to issuance of a building permit.

Goal 2: Evaluate conditions of existing municipal facilities.

Objectives:

- a. Create a maintenance program to assess conditions and need for scheduled repairs or replacement of existing facilities.
- b. Prepare funding procedures for the systematic maintenance of facilities.
- c. Develop plans, which establish priorities to address existing inadequacies in the City's infrastructure system.

Goal 3: Establish levels of service for municipal facilities.

Objectives:

- a. Determine reasonable level of service for facilities and work achieve this standard.

- b. Provide the needed provisions to insure that new growth does not impact existing facilities.
- c. The design of infrastructure improvements to accommodate an individual project should be achieved in such a manner as to consider potential future projects to avoid piecemeal infrastructure planning.

Goal 4: Establish a financing mechanism and procedure for backbone facilities based on the General Plan and levels of service.

Objectives:

- a. Create a (5) five-year Capital Improvement Program (CIP).
- b. Prepare and adopt impact fees and municipal improvement conditions related to development needs and opportunities.
- c. The City's Capital Improvement Program shall be adequate to meet future growth and development needs in conformity with the goals of the General Plan.

Goal 5: Provide adequate public infrastructure and services to meet the needs of future development.

Objectives:

- a. Through the development review process measure that public facilities and utilities are adequately sized to accommodate the proposed development and if applicable, allow for extensions for future developments consistent with master plans.
- b. Master infrastructure plan for newly developing areas may be prepared and adopted as necessary.
- c. Apply for Federal, State and regional funding sources set aside to finance infrastructure cost to the maximum extent feasible.

Goal 6: Require new development to provide or pay for its fair share of public facilities and infrastructure improvements.

Objectives:

- a. Prepare and adopt adequate fee schedules commensurate with the cost of planned improvements and services, with annual review and updates.
- b. All new development shall contribute its fair share of the cost of on-site and off-site public infrastructure and services as appropriate.
- c. The City may require development to install off-site facilities or a portion thereof, which also benefit other properties.

II. FACILITIES PLAN

A. WATER

1. Existing Supply and Storage

The City is presently served with potable water from a system of wells, storage tanks and reservoirs. Water is delivered via City maintained pipelines of various sizes and ages (See Exhibit II-I). Adequate pressure to provide service as well as fire fighting capability is maintained by the use of booster pumps and pressure relief/sustaining valves which produce several pressure zones as depicted by the above referenced exhibit. As all of the water is currently derived from groundwater wells, treatment is typically not required. When state mandated contaminant levels are periodically exceeded, disinfection is provided by the injection of liquid chlorine into the system.

Tehachapi pumps its groundwater from an adjudicated groundwater basin. The "safe yield" of the groundwater basin underlying the City has been estimated at 5,500 acre-feet per year (AFY) according to the Lockman and Associates Study dated June 1991 entitled City of Tehachapi Water and Waste Water Development Fee Study. The City currently has a base right to 1,401 AFY. As current demand exceeds this amount, the City is forced to purchase other owner's rights through an exchange pool. When water demand exceeds the amount of supply which can be procured by the City from the groundwater basin, the use of State Water Project (SWP) water will be required if continued growth is to occur. It is estimated that as much as 15,000 AFY of SWP water may be available for purchase from the Tehachapi-Cummings County Water District. However, this water will require treatment, filtration and/or disinfection. Presently, groundwater typically can be delivered untreated. Based on these conditions, it is imperative that new growth be tied to the procurement of additional water rights or the funding of a water treatment plant.

In terms of cost to the end consumer, the City of Tehachapi maintains two (2) service zones, Zone A and Zone B. If the developer of the project being served with municipal water conveyed their water rights at the development stage the property/project is placed in Zone A and the cost of water usage is calculated at a lower rate than properties/projects in Zone B which conversely did not convey water rights.

The City's distribution system is currently adequate to serve existing customers and is in good repair. An ongoing maintenance program, under the supervision of the Public Works Superintendent, is in effect to keep this infrastructure in good operating condition. It is anticipated that this maintenance program along with the Capital Improvement Program will

enable the City to continue to provide domestic and fire service to its customers, provided that adequate supplies of potable water remain available.

2. Reclaimed Water

Given the scarcity of water in the Tehachapi basin and in Southern California in general, conservation and reclamation are very important. The City supports the concept of reclamation and encourages conservation.

Water can be reclaimed in various ways. These include:

- ◆ Use of reclaimed, treated wastewater for irrigation and groundwater recharge.
- ◆ Capture, transportation and dispersal of storm water runoff for groundwater recharge.

Currently, the City uses effluent from its Wastewater Treatment Plant (WWTP) for agricultural irrigation. Under current state regulations, additional usage would require a higher level of treatment than the WWTP is capable of providing i.e., tertiary.

While the City supports the concept of water reclamation, no cost-effective methods of reclaiming water currently exist. The City will review the status of reclamation technology and regulation on a regular basis and will implement additional reclamation strategies when possible. Please refer to Section 6 (Reclamation) for more details.

3. Planned Facilities

A program to provide future backbone water service mains and other improvements is shown in Exhibit II-I. These mains and improvements shall be provided as growth occurs and requires water service. Main extensions and other improvements, beyond a specific project's boundary, may be required to provide adequate service to that project as well as to ensure continued adequate service to existing customers. Where deemed appropriate by the City, repayment agreements may be executed to enable costs for eligible improvements to be recovered by the party installing the improvements. These agreements could require future parties utilizing these improvements to reimburse the installing party for their pro-rata share of the costs.

The basis of design for the future backbone water main system (shown in Exhibit II-I) is generally as follows:

East - West Direction:

- ◆ 16" main in Highline Road across entire service area
- ◆ 12" main at each half mile (approximately) north and south of Highline Road

North - South Direction:

- ◆ 14" main at each mile (approximately)
- ◆ 12" main at each intermediate half mile (approximately)

Localized mains, in addition to the backbone facilities described above and shown in Exhibit II-I, shall be required to serve areas of future development. These localized mains typically vary in size from 8" to 12". The size and location of these mains shall be considered at the time of a development application.

In addition to the backbone water main system, the following additional improvements have been identified as being necessary to provide continued service and to accommodate future growth.

- ◆ Hickory Avenue Pressure Reducing Station
- ◆ White Oak Drive Pump Station
- ◆ Well No. 6 to Curry Street Tanks Tie-In
- ◆ Well near Tehachapi Boulevard and Tehachapi Willow Springs Road
- ◆ Reservoir and Appurtenances South of City
- ◆ Supplemental Power for Additional Well Pump
- ◆ Water Treatment Facility

4. Upgrading and Monitoring Facilities

The City currently monitors the quality of its potable water in accordance with state and federal law via regular sampling and analysis. If coliform is detected in quantities that exceed mandated levels, liquid chlorine is introduced into the system to provide disinfection. It is anticipated that these procedures can be followed for the foreseeable future to provide safe drinking water. However, it is conceivable that either state or federal regulations could be revised to such an extent that the current groundwater supply would

not be in compliance. If this situation occurred, the only alternative would be the construction of a water treatment facility to provide treated groundwater and/or SWP water meeting these revised regulations.

Given that the current supply consists exclusively of groundwater, it is imperative that the groundwater supply be protected. Methods to be utilized to protect the groundwater include:

- ◆ Control of the number of individual sewage disposal systems (leaching fields) percolating into the groundwater basin
- ◆ Enforcement of Storm Water Runoff Regulations
- ◆ Prevention of dumping of toxic or unsafe substances
- ◆ Implementation of the Household Hazardous Waste Element

Based on a continued growth rate of three- percent (3%)the City will utilizes more than they're adjudicated share of the groundwater pumped from the Tehachapi-Cummings basin by the year 1999. The difference between the adjudicated allotment and the quantity presently utilized is obtained by purchasing water from the exchange pool. Availability of water from this pool is not guaranteed. If this water were unavailable, the City could not serve its current customers without instituting rationing or some other conservation method. Based on this situation, it is imperative that future growth be required to provide additional water rights to the City as a condition of their development and/or contribute to the funding of the water treatment facility. The City, in conjunction with the Water Master, will continue to monitor water usage and availability on an annual basis and to consider purchasing additional water rights as needed and when available. Consideration of the availability to provide water service to any new development will be an integral part of the project approval process.

5. Fire Protection

The City presently has adequate supply and delivery capacity to provide fire protection for current residents. The City requires the following minimum fire flows for new development:

- ◆ Single family Residential-500 gallons per minute (GPM) for duration of 1 hour
- ◆ Commercial-1,000 GPM for duration of 2 hours
- ◆ Industrial-1500 GPM for a minimum duration of 4 hours

New development shall be required to demonstrate compliance with these requirements or if the above requirements are revised, the City requirements in effect at the time of the development application.

6. Reclamation

Given the scarcity of water in the Tehachapi basin and in southern California in general, conservation and reclamation are very important. The City supports the concept of reclamation and encourages conservation of this resource.

Water can be reclaimed in various ways. These include:

- ◆ Use of reclaimed, treated wastewater for irrigation of feed and fiber crops
- ◆ Use of reclaimed, treated wastewater for irrigation of parks, playgrounds etc as a replacement for the use of potable water for these applications
- ◆ Use of reclaimed, treated wastewater for ground water recharge
- ◆ Capture transportation and dispersal of storm water runoff for groundwater recharge

Currently, the City uses effluent from its Wastewater Treatment Plant (WWTP) for agricultural irrigation of non-consumable crops. Under current state regulations, a higher class of usage would require a higher treatment than the WWTP is currently capable of providing.

Any water reclamation projects will have to be evaluated for conformance with local state and federal statutes, environmental regulations and the City's storm water control policies.

Local building ordinances and the Uniform Building Code requires the use of water conservation devices in new construction. The City further requires as a condition of new projects that drought tolerant landscaping and efficient irrigation practices be employed.

7. Financing

The water facilities contained in the Water Master Plan and required for buildout of the General Plan will be financed through the collection of the Water Connection Fee in place at the time of development. The Water Connection Fee is updated annually to account for inflation and repayment of the debt.

Developers are responsible for constructing a minimum of an 8-inch waterline along the property frontage. When the Master Plan calls for facilities in excess on 8-inch in size, the developer will be required to install the facilities. The City will establish a repayment program to reimburse the developer from other properties benefiting from the improvement.

For developing properties located in areas designated as "Future Pumped Areas," the developer is responsible for planning and financing facilities which are required to connect to the existing backbone facilities. A repayment program will be established to reimburse the developer from other properties benefiting from the improvements.

B. SEWER

1. Existing Treatment and Collection Facilities

The City currently has adequate collection and treatment facilities to serve its residents. The General Plan area has been divided into sewage service areas based on existing and proposed collection facilities and drainage patterns. These areas, the treatment facility and the collection system are shown in Exhibit III-I. Land use assumptions relative to capacity calculations are illustrated on Exhibit III-II. Additional capacity for future growth exists in the treatment facility. Additional capacity exists in varying amounts in the sewage service areas. These items are described below.

Wastewater Treatment Facility

The City completed expansion of its WWTP in 1992. The plant currently has a design capacity of 1.25 million gallons per day (MGD). Current plant influent is approximately 0.6 MGD, or roughly one half of the plant design capacity. The plant expansion project was designed with additional future expansion in mind. Future expansion is discussed below in the "Planned Facilities" section. The plant is designed to provide treatment to a secondary level and is currently in compliance with state and federal regulations. Plant capacity exists for approximately double the current population or up to 2.50-MGD design flow would provide treatment capacity for ultimate General Plan build out. In addition, industrial waste and/or pumped septage could be received and treated at the facility. The WWTP headworks structure, control building, electrical service and standby generator and yard piping are all constructed to accommodate this future expansion. The major components required to achieve the additional expansion include an additional oxidation ditch, clarifier, and sludge disposal areas and effluent storage/disposal area. This plant is designed to provide secondary treatment.

Provisions for upgrading the plant to a higher level of treatment were not included in the expansion project. Plant effluent is currently used for

agricultural irrigation on City owned property only. Upgrading the plant to tertiary treatment would be required to allow use of plant effluent for additional purposes such as irrigation of play grounds, golf courses landscaping etc. Additional disinfection and filtration facilities would be required to provide a tertiary level of treatment. While expanding use of treated effluent would be beneficial; the capital cost of upgrading to a tertiary treatment level precludes consideration at this time. If stricter state requirements were placed on the WWTP effluent, it may become necessary to consider this upgrade.

Collection System

The City maintained collection system is generally in good repair. The City is embarking on an annual inspection and maintenance program to identify areas of deterioration and root intrusion or inflow and infiltration. It is anticipated that any problems encountered by this inspection program will be addressed under the Capital Improvement Program. As each service area contains different conditions, they are discussed individually below. Future improvements are discussed in the "Planned Facilities" section following.

◆ **Tucker**

The Tucker area currently flows through an 8" pipe easterly across Antelope Run and into the Mulberry area. Growth in this area is constrained by the Antelope Run crossing and further downstream in the Mulberry area. Only minimal additional capacity exists in this area due to these constraints. The Capital Improvement Plan calls for the Antelope Run crossing to be reversed and effluent to be collected in a new 12 inch main to be located in Tucker Road. In order for the effluent to reach the treatment plan a lift station and force main will also need to be installed in proximity of the corner of Tucker Road and Tehachapi Boulevard. Property north of Conway Avenue cannot be provided sewer service without construction of major facilities as discussed in the "Planned Facilities" section below.

◆ **Mulberry**

The Mulberry area drains into the 24" Mill Street sewer. Growth is constrained in this area by the flat grades of the existing main in "E" and Mulberry Streets. Only minimal additional capacity exists in this area because of these constraints. If the Antelope Run crossing from the Tucker area were reversed, rerouting flow from the Tucker area; additional capacity would be available in the Mulberry area.

◆ **Mill**

The Mill area is served by a 12" main in Mill Street which flows to an 18" main and ultimately a 24" main entering the WWTP. Adequate capacity exists in this area for full build out, based on the General Plan.

◆ **Dennison**

The Dennison area is served by the Industrial Trunk Sewer. The trunk sewer is stubbed across Tehachapi Boulevard at Dennison Road and at Steuber Road with 12" mains. This system consists of large diameter mains which flow directly to the WWTP. Adequate capacity exists in this area for full General Plan build out.

◆ **East Tehachapi**

The East Tehachapi area contains a dry sewer system in Tehachapi Boulevard from the Highway 58 overcrossing to Tehachapi Willow Springs Road. This system is currently not connected to the WWTP. No connections can be made to this system or service provided until improvements are constructed to pump flow back to the Dennison area and into the Industrial Trunk Sewer. The required improvements are discussed in the "Planned Facilities" section below.

◆ **Old Town**

The Old Town area consists mainly of the original townsite and downtown area of Tehachapi. The sewers in this area are older and may be in need of replacement. While capacity may exist in this system, development will be analyzed on a case by case basis to determine if adverse impacts will result to the sewer system.

◆ **Industrial**

The Industrial area is served by a large capacity sewer system known as the Industrial Trunk Sewer. This system has adequate capacity to accommodate ultimate General Plan build out. The portion of this area north of Highway 58 currently is not served with a sewer system.

◆ **Capital Hills**

The Capital Hills area consists of a large scale master planned development. The first phase of this development has been completed and large diameter sewer mains have been installed. Adequate capacity exists in this system for ultimate General Plan build out.

◆ Loop Ranch

The Loop Ranch area is a specific plan area which is currently undeveloped and is not served by a sewer system.

2. Planned Facilities

Wastewater Treatment Facility

The WWTP expansion project completed in 1992 was designed with additional future plant expansion in mind. The plant is designed to allow doubling in capacity from 1.25 MGD to 2.50 MGD design flow. Current plant flow (influent) is approximately 0.6 MGD. It is anticipated that 2.50 MGD design flow would provide treatment capacity for ultimate General Plan build out. The WWTP headworks structure, control building, electrical service and standby generator and yard piping are all constructed to accommodate this future expansion. The major items required for additional expansion include an additional oxidation ditch, clarifier, sludge disposal area and effluent storage/disposal area.

Provisions for upgrading the plant to a higher level of treatment were not included in the expansion project. Plant effluent is currently used for agricultural irrigation on City owned property only. Upgrading the plant to tertiary treatment would be required to allow use of plant effluent for additional purposes. These purposes could include landscaping irrigation and groundwater recharge. Additional disinfection and filtering facilities would be required to provide a tertiary level of treatment. While expanded use of treated effluent would be beneficial, the capital costs of upgrading the treatment facilities precludes consideration of upgrading to tertiary treatment at this time. If stricter state requirements were placed on the WWTP effluent, it may become necessary to consider this upgrade.

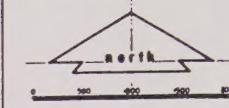
Collection System

A program to provide future collection system expansion is shown in Exhibit III-I. In addition to the facilities shown in the above referenced Figure, localized mains shall be required to serve areas of future development. These mains will typically be 8" in size. The size and location of these mains shall be considered at the time of a development application.

Planned facilities are described below for each sewer service area.

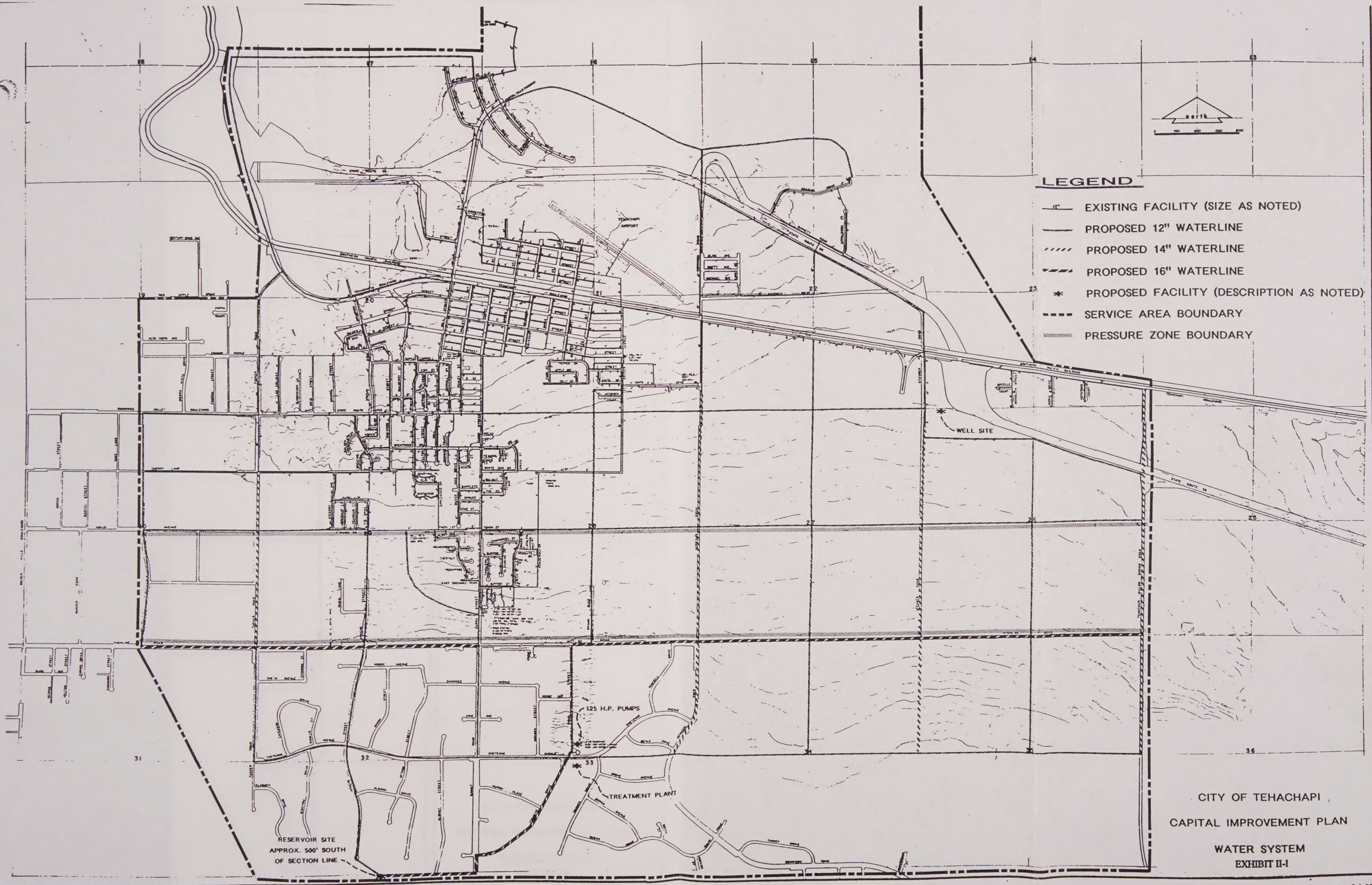
◆ Tucker

In order to alleviate constraints downstream from the Tucker area in the Mulberry area, sewage from the Tucker area will be redirected via gravity



LEGEND

- EXISTING FACILITY (SIZE AS NOTED)
- PROPOSED 12" WATERLINE
- PROPOSED 14" WATERLINE
- PROPOSED 16" WATERLINE
- PROPOSED FACILITY (DESCRIPTION AS NOTED)
- SERVICE AREA BOUNDARY
- PRESSURE ZONE BOUNDARY

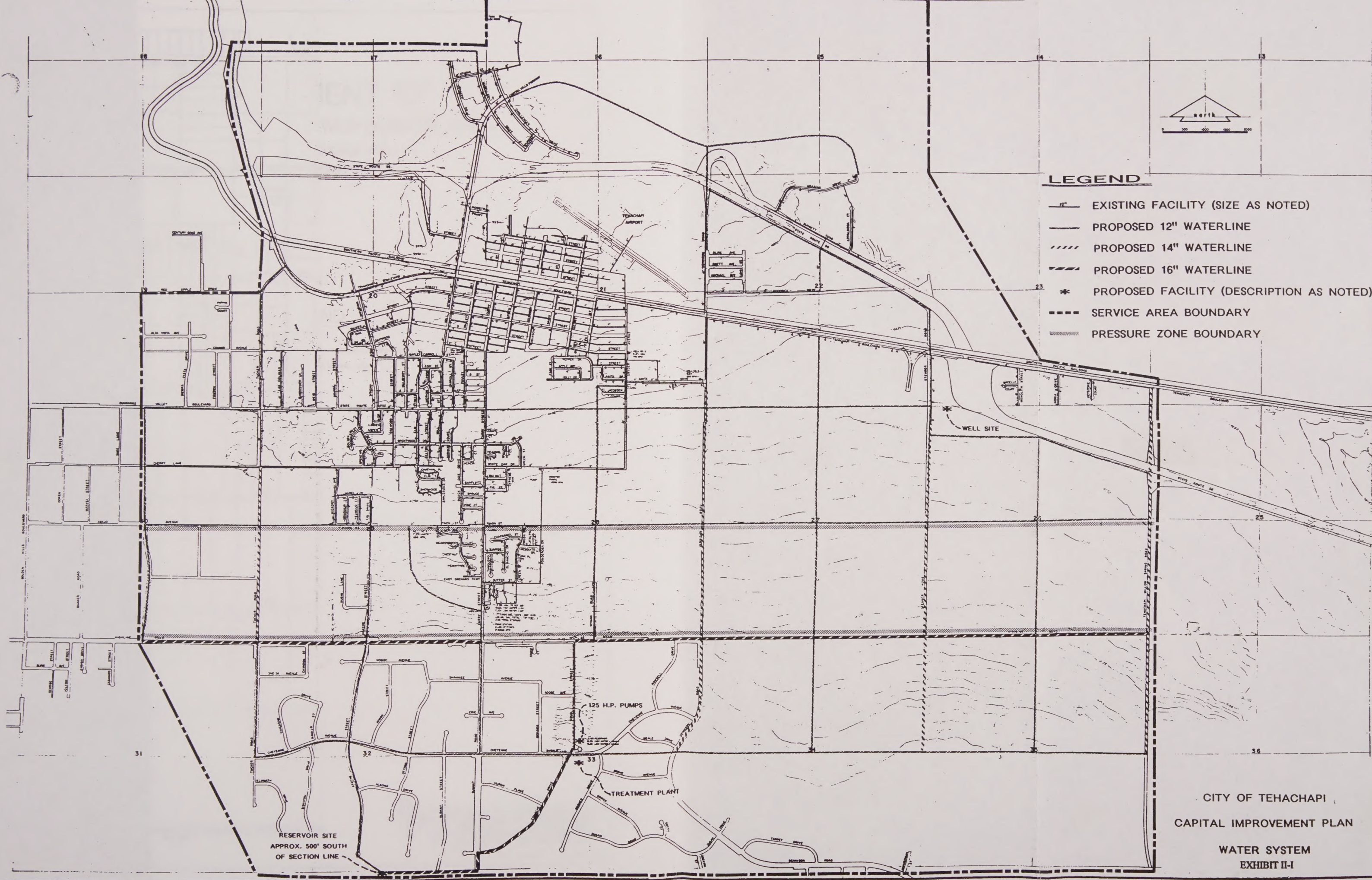


CITY OF TEHACHAPI
CAPITAL IMPROVEMENT PLAN
WATER SYSTEM
EXHIBIT II-1



LEGEND

- EXISTING FACILITY (SIZE AS NOTED)
- PROPOSED 12" WATERLINE
- PROPOSED 14" WATERLINE
- PROPOSED 16" WATERLINE
- PROPOSED FACILITY (DESCRIPTION AS NOTED)
- SERVICE AREA BOUNDARY
- PRESSURE ZONE BOUNDARY



CITY OF TEHACHAPI
CAPITAL IMPROVEMENT PLAN
WATER SYSTEM
EXHIBIT II-I

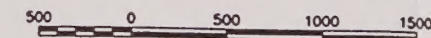
ATTACHMENT "D"

PROPOSED TUCKER SEWER SERVICE AREA

TUCKER SEWER SERVICE AREA
CITY OF TEHACHAPI, CA

LEGEND

- TUCKER SEWER SERVICE AREA BOUNDARY
- MULBERRY SEWER SERVICE AREA



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J.N. T-97-59 28 APRIL 1998



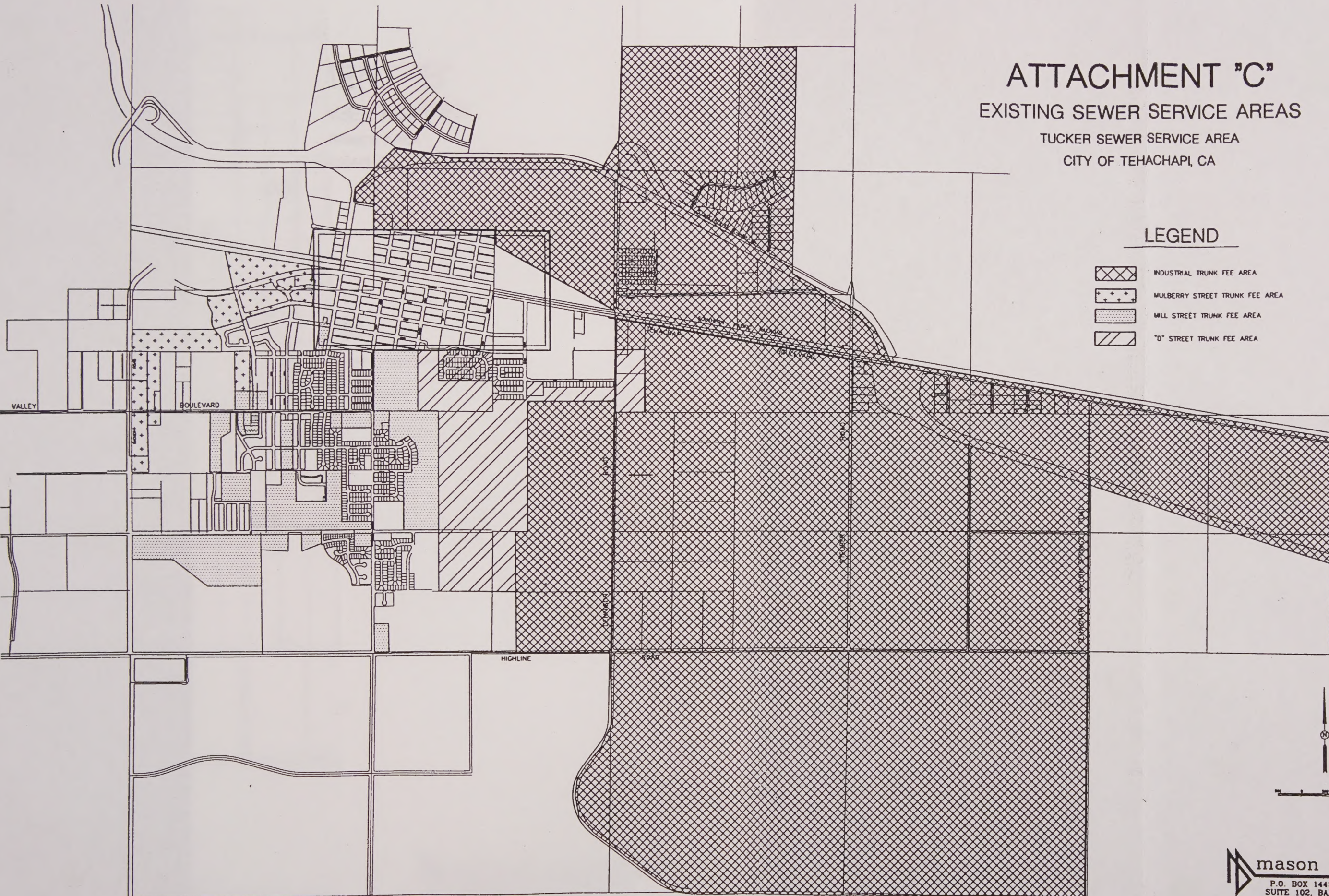
ATTACHMENT "C"

EXISTING SEWER SERVICE AREAS

TUCKER SEWER SERVICE AREA
CITY OF TEHACHAPI, CA

LEGEND

-  INDUSTRIAL TRUNK FEE AREA
-  MULBERRY STREET TRUNK FEE AREA
-  MILL STREET TRUNK FEE AREA
-  "D" STREET TRUNK FEE AREA



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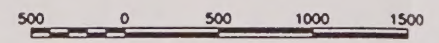
ATTACHMENT "B"

PROPOSED SEWAGE FACILITIES

TUCKER SEWER SERVICE AREA
CITY OF TEHACHAPI, CA

LEGEND

- EXISTING SEWER (8" UNLESS NOTED OTHERWISE)
- EXISTING MANHOLE
- PROPOSED SEWER (SIZE AS NOTED)
- PROPOSED MANHOLE



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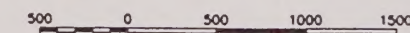
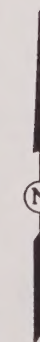
ATTACHMENT "A"

EXISTING SEWAGE FACILITIES

TUCKER SEWER SERVICE AREA
CITY OF TEHACHAPI, CA

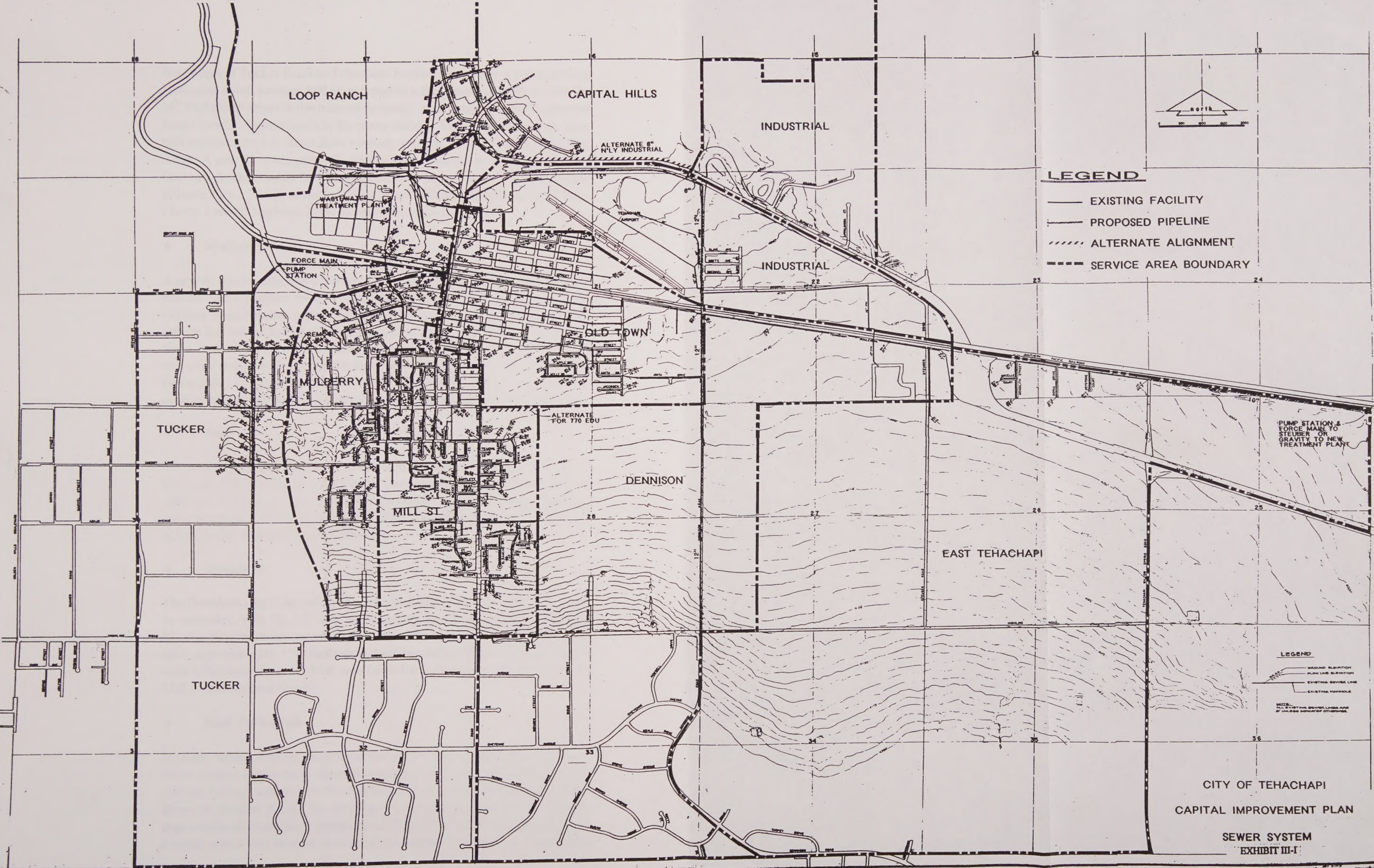
LEGEND

- EXISTING SEWER (8" UNLESS NOTED OTHERWISE)
- EXISTING MANHOLE



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CITY OF TEHACHAPI
CAPITAL IMPROVEMENT PLAN
SEWER SYSTEM
EXHIBIT III-I

flow north in Tucker Road to Tehachapi Boulevard and into a pump station. From that point, sewage will be pumped in a force main easterly to join the 24" Mill Street sewer at the railroad crossing. A 12" main will be constructed from Conway Avenue north to the pump station. The Antelope Run crossing will be reconstructed to direct flow westerly into the new 12" sewer in Tucker Road. A new 8" sewer paralleling the existing 8" sewer in Tucker Road from Conway Avenue south to Cherry Lane will be required to accommodate ultimate flow. The 8" sewer in Tucker Road will be extended southerly from Cherry Lane to Highline Road to extend service to this area.

◆ **Mulberry**

A new 8" main is required paralleling the existing main in "E" and Mulberry Streets. This parallel main is required due to diminished capacity in the existing main because of very flat grades. The timing when this new main will be influenced by the construction of the Tucker area planned facilities. If the Tucker Road sewer and pump station is constructed, additional capacity will exist in the Mulberry system because flow from the Tucker area will be redirected. The amount of capacity available in the Mulberry system will need to be assessed prior to approval of development applications in this area.

◆ **Mill**

All of the planned backbone sewer facilities are in place in this area. However, if development occurs in the Dennison area, sewage flow could be directed westerly to Curry Street. If this occurs, a new 12" line is required from the point of connection at the 12" line in the alley between "C" and "D" streets to the westerly limits of this area.

◆ **Dennison**

The Dennison area is served by the Industrial Trunk Sewer. A 12" sewer will be extended from the 12" stub at Tehachapi Boulevard south to Highline Road to provide sewer service to this area. Due to excess capacity in the Mill area, approximately 770 equivalent dwelling units (EDU) could be served within this area from the Mill area (with the installation of facilities in the Mill area described above).

◆ **East Tehachapi**

A pump station will be required at the easterly or downstream end of the sewer system in this area. From that point a force main will be required to convey sewage westerly to the existing 12" stub for the Industrial Trunk Sewer at Steuber Road. No development requiring sewer service may be approved in this area until construction of these facilities. In some instances a septic system can be used as an interim solution. The septic tank alternative

will be evaluated on a case by case basis in terms of appropriateness and feasibility.

◆ **Old Town**

No additional backbone facilities are planned in this area. Development in this area will be analyzed on a case by case basis to determine its effect on the existing sewer system.

◆ **Industrial**

The Industrial area is served by a large capacity sewer system known as the Industrial Trunk Sewer. This system has adequate capacity of accommodate ultimate General Plan build out. No additional backbone facilities are planned for this area. Any development north of Highway 58 will be required to extend sewer service to that area.

◆ **Capital Hills**

The Capital Hills area consists of a large scale master planned development. The first phase of this development has been completed and large diameter sewer mains have been installed to serve this area. As development continues, new construction will be required to extend sewer improvements as needed.

◆ **Loop Ranch**

The Loop Ranch area is a specific plan area which is currently undeveloped and is not served by a sewer system. Consideration of required sewer infrastructure will occur when a development proposal is processed.

3. **Upgrading and Monitoring Facilities**

WWTP influent and effluent are currently monitored for both quantity and quality. Monitoring and reporting are currently in compliance with state and federal regulations. This monitoring program will provide advance notice if plant expansion is required to meet future demand or if the plant needs to be upgraded to meet stricter effluent standards which may be applicable in the future.

The inspection and monitoring program the City is establishing for the collection system will provide evidence of problems with the system. Where growth or new connections are planned in advance of the City being able to rectify these problems through its Capital Improvement Program, remediation may be a condition of any development approvals.

4. Financing

The wastewater facilities proposed in the Wastewater Master Plan will be financed through the collection of Wastewater Connection Fees from new development. The Wastewater Connection fee is updated annually to reflect inflation and payment on the financing mechanism for the treatment plant. The Connection Fee will also reflect any changes to state and federal regulations which may require additional facilities not anticipated by the Master Plan.

New development which is located in outlying areas will be responsible for planning and financing of wastewater facilities required to connect to the City's existing backbone system. Repayment programs will be established to reimburse the developer from other properties benefiting from the improvement. The developer will also be reimbursed for the oversizing costs of constructing mains based upon City policy.

C. STREETS

1. See Circulation Element
2. Maintenance
3. Financing

The circulation facilities contained in the Circulation Plan will be financed through a combination of the City's Capital Improvement Program (CIP), Traffic Impact Fee program, and the recommended additional fee to accelerate improvement of critical facilities in Tier 2 and 3 areas.

The CIP is funded by Sales Tax (Prop A), Gas Tax, and revenues generated by the Traffic Impact Fee program. Projects are prioritized in CIP according to their level of deficiency and needs within the community. The CIP is prepared for a five-year period and is updated every year reflect changes in needs and priorities.

The Traffic Impact Fee program includes the following types of traffic and transportation facilities: traffic signals, bridges, street widening, street center paving, and median landscaping. A major component of the Traffic Impact Fee is also the cost of right-of-way acquisition. A study of the Traffic Impact Fee needs to be prepared. A fee per Dwelling Unit for all residential development and per square footage or equivalent Dwelling Unit for commercial and industrial projects will generate sufficient revenue to mitigate impacts of new development through buildout of the General Plan.

D. DRAINAGE

1. Existing Facilities

Historically, Tehachapi has been subjected to extensive flooding during periods of heavy precipitation or snowmelt due to runoff from the mountains to the south. A series of dams and diversion structures to the south of town has greatly reduced this hazard. As evidence of this fact, the Federal Emergency Management Agency has reclassified all of the area within the General Plan boundaries below the dams as Flood Hazard Zone "B". This classification means that these areas are within the 500-year floodway, but are subject to flooding of depths less than one foot in a 100-year frequency storm. Property designated Flood Hazard Zone "B" does not require special flood hazard insurance. These dams and diversion structures were constructed and are maintained by the Tehachapi-Cummings County Water District.

Construction of the dams and diversion structures has alleviated the City's flooding problems greatly; however, storm water runoff concerns still exist. The City has experienced a variety of methods of storm drainage control in the past including retention basins, detention basins and various types of channels, pipes and structures intended to convey runoff downstream. These have provided varying degrees of protection. With this General Plan Element, the City intends to implement a cohesive approach to storm water runoff control and provide an overall master plan for the installation of storm drainage facilities.

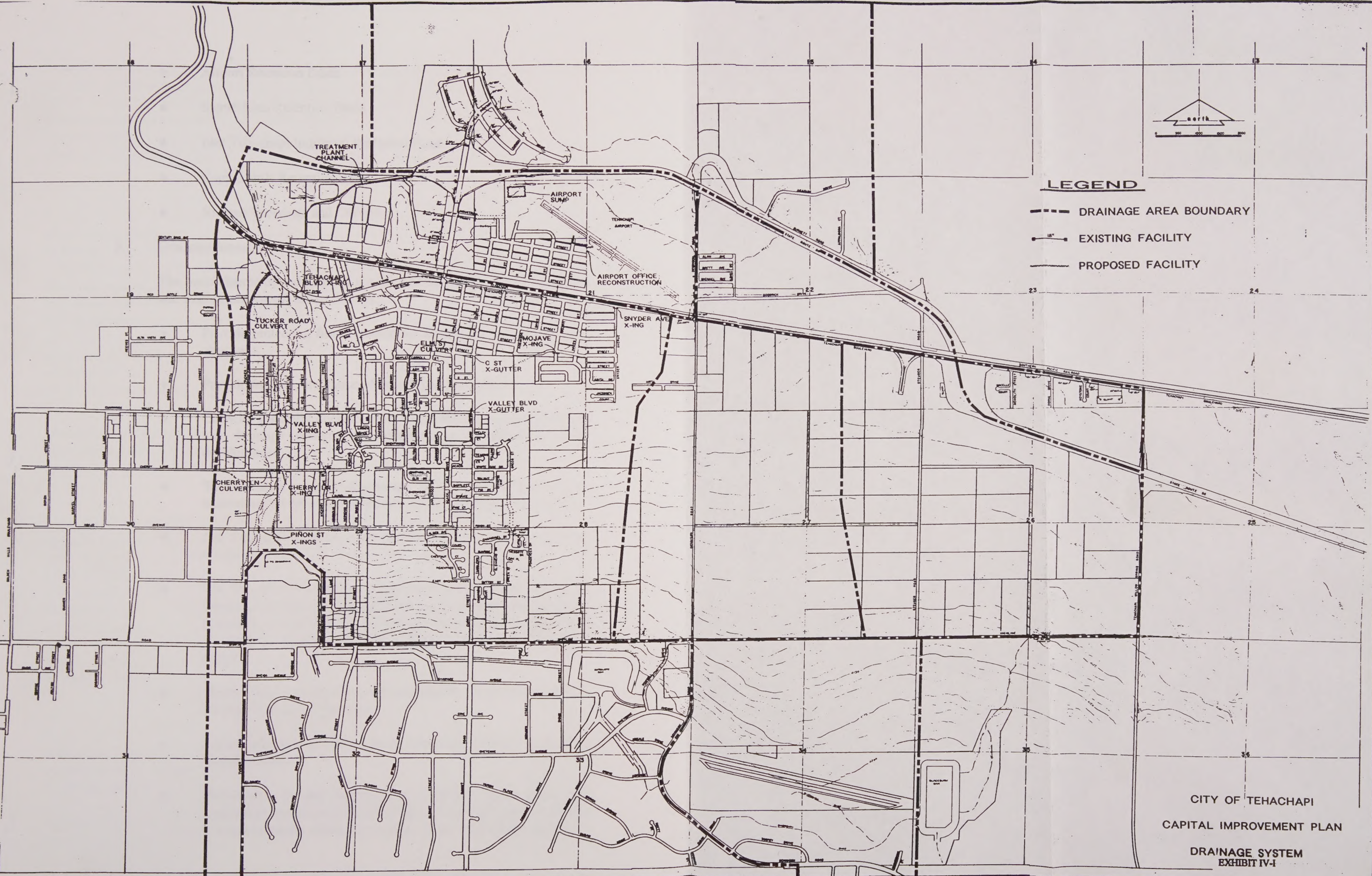
The following major storm drainage facilities currently exist. These facilities are shown on Figure V-I.

- ◆ Dams and Diversion Structures
- ◆ Antelope Run
- ◆ Tucker Road Channel
- ◆ Elm Street Storm Drain
- ◆ Mulberry Street Channel
- ◆ Dennison Road/Airport Channel
- ◆ Wastewater Treatment Plant Channel
- ◆ Pinon Street Retention Basin



LEGEND

- DRAINAGE AREA BOUNDARY
- - - EXISTING FACILITY
- PROPOSED FACILITY



CITY OF TEHACHAPI
CAPITAL IMPROVEMENT PLAN
DRAINAGE SYSTEM
EXHIBIT IV-1

- ◆ Airport Retention Basin
- ◆ Summit Inn Retention Basin
- ◆ East Tehachapi Industrial Retention Basin
- ◆ Capital Hills Retention Basin
- ◆ Various Crossings and Culverts

2. Drainage Areas

The main objectives and goals of the General Plan with regard to drainage and storm water runoff are as follows:

- ◆ Provide protection from flooding for homes, businesses and other structures.
- ◆ Provide for safe circulation of vehicles and pedestrians.
- ◆ Capacity generally does not exist within the existing public streets and drainage systems and facilities to accommodate future development.
- ◆ The City shall generally discourage the construction of small City maintained retention basins serving areas of less than forty acres.
- ◆ The City shall encourage the development of area-wide drainage solutions.
- ◆ The City shall require that a proposed development provide for disposition of storm water runoff leaving or traversing their property. In general, runoff cannot be directed onto publicly maintained streets or adjacent property. Methods to convey or control this runoff include:
 - ◆ Deposit into a downstream drainage facility if one exists and has adequate outfall and capacity.
 - ◆ Conveyance to and control in an area-wide, publicly maintained retention basin.
 - ◆ Conveyance to and control in a detention basin which will temporarily confine runoff and release it into a downstream facility in a concentration within the capacity of the downstream facility.

- ◆ Conveyance to and control in a temporary retention basin, maintained by the developer. This condition will be considered when an adequate, area-wide facility is not available at the time of the proposed development; and the City determines that construction of the area-wide facility is not feasible at that time. The development will be required to contribute to the construction of the area-wide facility.

3. Drainage Planned Facilities

Several major drainage areas exist within the City. The limits of these areas as shown on Exhibit V-I and described below are intended to be general in nature. In some instances the facility has been studied and specific design parameters have been achieved. In other instances the problem has been ascertained along with a general solution, however, not to the degree that specific improvements are identified. Specific development applications will be reviewed on a case by case basis and their inclusion in a particular drainage area will be assessed at that time. It should be noted that the drainage areas discussed herein and the sewer service areas discussed in Section “B” are not coterminous. Future planned improvements within an area are included in the following discussion.

The drainage areas discussed herein and the sewer service areas in Section “B” are not the same. Future planned improvements within an area are included in the following discussion.

◆ Antelope Run

The Antelope Run area lies on either side of Antelope Run, a large, meandering natural channel. It is the major drainage channel through Tehachapi. Prior to construction of the dams and diversion structures south of Highline Road, the design flow for Antelope Run was calculated at 3,350 cfs in a 100-year storm. With these structures in place, the anticipated 100-year flow at ultimate buildout is approximately 1,000 cfs. The City intends for development occurring within this area to construct drainage facilities to convey runoff to Antelope Run. Antelope Run falls generally within easements granted to the Tehachapi-Cummings County Water District (TCCWD). The TCCWD maintains the channel and would have to approve any development which increases the flow into Antelope Run.

Future improvements within this area include:

Pinon Street Crossing, Cherry Lane Crossing, Valley Boulevard Crossing and Tehachapi Boulevard Crossing - The existing culverts at each of these locations are overburdened and need to be replaced with facilities capable of conveying the ultimate runoff.

Cherry Lane Culvert - Runoff from Tucker Road south of Cherry Lane will be picked up and carried in a culvert to Antelope Run.

◆ **Tucker Road**

The Tucker area lies generally on either side of Tucker Road between Cherry Lane and Tehachapi Boulevard. The City intends for runoff from south of Cherry Lane to be diverted easterly at Cherry Lane to Antelope Run (See Antelope Run area below). This improvement will allow the currently overburdened crossings under Valley Boulevard on either side of Tucker Road to function at or below capacity. A concrete lined trapezoidal channel conveys drainage from the west side Valley Boulevard crossing and from the Albertson's shopping center north to Tehachapi Boulevard and ultimately into Tehachapi Creek. No additional capacity is presently available in this channel. If the Cherry Lane culvert was constructed, additional capacity might be available. Inadequate drainage capacity currently exists along the east side of Tucker Road.

Future improvements within this area include:

Tucker Road Culvert - The channel along the west side of Tucker Road would be replaced with a culvert. Adequate capacity will be required for future development as well as to accommodate the existing runoff on both sides of Tucker Road. This culvert could run northerly to the railroad easement at Tehachapi Boulevard or easterly to Antelope Run.

◆ **Elm Street Storm Drain**

Solutions to the Elm drainage condition have been approached rather piece meal from 1990 to 1993. Since 1990 the drainage condition has been improved. However, a more permanent and comprehensive solution is still required. Towards that end, the Elm Street Drainage improvement calls for the installation of a permanent thirty inch line extending north from an existing outlet box located at Melrose Court and extended within Elm Street a distance of three hundred feet to the City Park. Ultimately storm water from the Elm Street drainage will be conveyed into an existing drainage swell.

◆ **Mulberry Street Channel**

Runoff from this area currently flows northerly generally via Mulberry Street to a culvert crossing Tehachapi Boulevard and ultimately into Tehachapi Creek. The drainage facilities are inadequate and no additional capacity is available. This area is experiencing flooding during most storm events. Due to the lack of adequate drainage facilities, a retention basin is proposed to accommodate new development south of Cherry Lane. Any future development contributing runoff to the present, inadequate system should be conditioned to make or contribute to the funding of the required improvements.

Future improvements within this area include:

Retention Basin - an area-wide retention basin is planned for all future development south of Cherry Lane within this area.

Elm Street Culvert - the existing culvert needs to be extended from Melrose Court northerly to the City Park.

◆ **Old Town**

The Old Town area consists primarily of improved parcels. Storm drain facilities in this area are generally considered adequate. Development proposals within this area will be considered on a case by case basis to assess their impact on storm drain facilities.

Future improvements within this area include:

Valley Boulevard and "C" Street cross gutters - these cross gutters are proposed on the west side of Curry Street to direct the runoff northerly to the Tehachapi Boulevard storm drain and alleviate flooding in the Mulberry area.

◆ **South of Highline**

The area south of Highline Road is primarily underdeveloped. The dams and diversion structures protect the area north of Highline Road from runoff and flooding from this area and the mountains to the south. City practices has been to assume that runoff from the south of Highline area will be contained within this area or pass through the dams and diversion structures. Based on these factors, the use of area-wide retention basins is anticipated. These basins should be provided to serve an area of not less than 40 acres. The exact size and location of these facilities will be reviewed at the time of a development proposal. Any development proposals will be required to construct an area-wide retention basin or contribute to the funding of same.

◆ **Central**

This area consists primarily of undeveloped property. No drainage facilities are available to convey the runoff to a downstream facility; therefore, the use of area-wide retention basins is anticipated. These basins should be provided to serve an area of not less than 40 acres. The exact size and location of an area-wide retention basin will be determined at the time of each development proposal within this area. Any development proposal will be required to provide the property required to construct an area-wide retention basin or contribute to the funding of same.

◆ **Dennison**

The Dennison area is comprised of primarily undeveloped property. Box culverts exist at the intersection of Dennison Road and Tehachapi Boulevard which convey runoff northerly and into the Airport Channel (See Airport area

described below). A culvert could be extended from this location southerly to serve future development in this area. Analysis of the capacity of the existing culverts and the downstream channel would be required at the time of a development proposal. The use of area-wide retention basins is proposed for development proposals which will not be served by the anticipated Dennison Road culvert.

◆ **Steuber**

This area consists primarily of undeveloped property. No drainage facilities are available to convey the runoff to a downstream facility; therefore, the use of area-wide retention basins is anticipated. These basins should be provided to serve an area of not less than 40 acres. The exact size and location of an area-wide retention basin will be determined at the time of each development proposal within this area. Any development proposal will be required to provide the property required to construct an area-wide retention basin or contribute to the funding of same.

◆ **Hotel**

This area is served by an existing, privately maintained retention basin. This retention basin was designed to accommodate only the areas of the hotel, restaurant and service station and no additional capacity is available. No future improvements are anticipated within this area.

◆ **East Tehachapi**

The Highlands area is served by an existing, publicly maintained retention basin. This retention basin was designed to accommodate only the properties within this area and no additional capacity is available. No future improvements are anticipated within this area.

◆ **Airport**

The Airport area consists primarily of the Tehachapi airport and the wastewater treatment plant. In addition, some areas of industrial and residential development exist. Runoff from the airport and the area to the south of it will be contained in the Airport Retention Basin. Runoff from the anticipated industrial development to the north of the airport, as well as from the Dennison area will be conveyed downstream via the Airport Channel. This channel is currently a meandering, natural channel. Any development proposals which contribute runoff to this channel will be required to assess its capacity.

Future improvements in this area include:

Airport Retention Basin - the airport retention basin will be required to be deepened or expanded to control all runoff from the airport area south of the runway and the adjacent area south of the airport and north of the railroad tracks.

Airport Channel - the channel will need to be improved to accommodate future development and increased runoff.

Treatment Plant Channel - the channel is currently overburdened and will need to be improved to accommodate present runoff and future development.

◆ **Goodrick**

This area consists primarily of lightly developed industrial property. The lots are typically large and the area is bisected by Goodrick Road. The large size of the lots and the location of Goodrick Road makes providing an area-wide retention basin difficult. Although a channel exists along the south side of Highway 58 and the area generally drains to this channel in its current state; providing improved drainage facilities to convey ultimate runoff to this channel would also be difficult. Based on these factors, individual, privately maintained retention basins are proposed for this area.

◆ **Capital Hills**

The Capital Hills area is being developed as a master planned industrial development. It is anticipated that the other properties north of Highway 58 will be developed in a similar manner. The use of area-wide retention or detention basins is proposed in this area.

Future improvements in this area include:

Capital Hills Retention Basin - this retention basin is overburdened during major storm events. Runoff stored in this basin does not percolate within the required seven days. A pumping system is required to convert this basin into a detention basin and convey runoff into the downstream channel at a controlled rate after the storm peak has passed. The capacity of this basin should be assessed at the time of a development proposal, which will contribute runoff to it.

◆ **South of Highline**

The area south of Highline Road is primarily undeveloped. The dams and diversion structures protect the area north of Highline Road from runoff and flooding from this area and the mountains to the south. City practice has been to assume that runoff from the south of Highline area will be contained within this area or pass through the dams and diversion structures. Based on these factors, the use of area-wide retention basins is anticipated. These basins should be provided to serve an area of not less than 40 acres. The exact size and location of these facilities will be reviewed at the time of a development proposal. Any development proposal will be required to provide the property required to construct an area-wide retention basin or contribute to the funding of same.

◆ **Snyder Avenue/Tehachapi Boulevard Intersection**

During storm events the Snyder Avenue/Tehachapi Boulevard intersection typically becomes flooded and silted and as such constitutes a hazardous condition. The flooding is caused by the fact that the intersection, in its current condition, is a relatively deep cross gutter, which accepts and conveys storm runoff flowing westerly along Tehachapi Boulevard and northerly along Snyder Avenue. The two drainages converge at the intersection and flow westerly above ground through the cross-gutter. To address this condition it is proposed to install a catch basin at the southeast corner of the intersection in order to intercept and prevent the storm water from crossing the intersection. The storm water would then be conveyed to an existing 24-inch storm drain located in Tehachapi Boulevard. In conjunction with this improvement it is assumed that relatively deep cross gutter can be eliminated in favor of a more conventional crown section, which will also improve the condition of the intersection.

◆ **Merion Way/Valley Boulevard Drainage**

Historically storm flows emanating from the foothills south of the City of Tehachapi have been concentrated in Kelton Street and carried through Merion Way causing a flooding condition. To address this drainage problem within Merion Way an earthen berm structure was constructed along the critical section of Valley Boulevard in order to divert storm flows away from Merion Way along the north side of Valley Boulevard. The Merion Way/Valley Boulevard facility is being included in the Public Facilities Element as a reminder of sorts that any improvements to the north side of Valley Boulevard need to retain an equivalent protection to Merion Way already provided by the earthen berm.

4. **Compliance With Storm Water Run Off**

Storm water runoff is currently regulated by the National Pollution Discharge Elimination System (NPDES) division of the federal Clean Water Act. These regulations cover most industrial uses as well as any construction project which disturbs more than 5 acres. The regulations are intended to prevent pollutants and toxic substances from being conveyed via surface runoff into downstream waterways or into the groundwater supply. This protection is especially important in a community such as Tehachapi which relies on a groundwater aquifer for its potable water supply.

The City will require conformance with the NPDES for any new development projects and strive to bring existing activities into conformance.

5. **Implementation**

Development proposals which are submitted to the City during buildout of the General Plan will be reviewed to determine the adequacy of drainage facilities impacted by the project. Developers will be responsible for

accepting all drainage flows tributary to the subject property, and providing permanent drainage facilities through the limits of the development to a point of satisfactory disposal. Requirements for on-site and off-site storm drain improvements will be determined to the satisfaction of the City Engineer based on a drainage study prepared for the project. The Drainage Master Plan shall be prepared and will be used as a guideline in determining the backbone drainage facilities serving the proposed development.

If included in a Storm Drain Basin, new development shall be required to pay a basin fee. Storm Drain Basins which shall be formed by the City. The basins cover most of the General Plan area. The basins were formed according to Section 66483 of the Government Code (Subdivision Map Act) of the State of California and Section 17.28.150 of the Subdivision Ordinance of the City of Tehachapi. These legislative acts provide for establishment of drainage basins for the purpose of defraying the costs of constructing planned drainage facilities. The acts also declare that the local agency shall reimburse a subdivider who is required by the agency to construct a portion of the basin-wide facilities.

It is anticipated that the Drainage Master Plan will be prepared and result in the adoption of basin boundaries covering the entire General Plan Area. This is equitable since all properties contribute to the need for drainage facilities.

The implementation of this Citywide Facilities Plan for drainage will be affected by adoption of the Drainage Master Plan. The Master Plan will establish drainage basins and identify backbone drainage facilities needed to serve existing and proposed development based on land use designations in the General Plan. The financing portion of the Drainage Master Plan will determine the basin fees to be collected from new development. These fees will be used to finance the construction of master planned facilities. New development will be required to plan and construct localized facilities connecting the new development to existing and master planned backbone facilities.

The implementation of this Citywide Facilities Plan for Drainage requires that a monitoring program be put into place and that annually, the Director of Public Works prepare a report which includes the following:

1. Provide an update on the Storm Drain Basin fees, revenues generated and expenditures that occurred during the previous year.
2. Identify the number of residential units constructed in the previous year and the basins in which they are located.
3. Analyzes the impact of development outside of the General Plan boundary which effects storm drain facilities in the City.

4. Identify all Letters of Map Revision (LOMAR) that were issued by the Federal Emergency Management Agency (FEMA) for development within the 100-year flood plain.
5. Identify capital projects planned to improve existing storm drain deficiencies, and effort by developers to mitigate impacts to existing deficiencies, including construction of retention basins.
6. **Financing**

The drainage facilities contained in the Drainage Master Plan will be financed through collection of Storm Drain Basin Fees from new development. The Drainage Master Plan will establish the fees necessary to construct the ultimate facilities at buildout of the General Plan. It is anticipated that the fee amounts will be updated on a periodic basis to reflect inflation and any changes in land use which may require additional facilities not anticipated in the Drainage Master Plan.

Improvements to existing storm drain deficiencies will be financed as part of the City's Capital Improvement Program (CIP). Due to the lack of available resources, only those storm drain deficiencies which pose a significant threat to public health and safety will be given a high priority in the CIP. In order to proceed ahead of improvements in the CIP, new development may be required to improve deficient drainage facilities and be reimbursed by the City at a future date.

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Adopted on October 18, 1999

NOISE ELEMENT

Adopted on October 18, 1999

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I. INTRODUCTION

The Noise Element is a statement of the City's policy and intent regarding land use in relation to environmental noise and the control of noise sources within the community. Its purpose is to provide a framework within which future planning and noise mitigating decisions will be made and implemented. It is intended to represent the consensus of the community's goals and objectives pertaining to the control of environmental noise.

In addition, the Noise Element is intended to provide a set of correlated procedural guidelines and criteria to be used by the City planning and engineering departments to minimize noise conflicts in existing situations and in new developments.

Implementation of the Noise Element is to be achieved through improved planning and zoning regulations reflecting quantified noise criteria, development of noise abatement strategies, introduction of noise criteria in the building code, application of noise regulations controlling stationary and moving noise sources, and practical tools which can be used in the day-to-day activities of the City.

A. STATUTORY REQUIREMENTS

California State Law, Government Code Section 65302(g) requires the preparation and adoption of a noise element as follows:

The noise element is prepared pursuant to the guidelines adopted by the Office of Noise Control pursuant to Section 46050.1 of the Health and Safety Code, and quantifies the community noise environment in terms of noise exposure contours for both near and long-term levels of growth and traffic activity. Such noise exposure information becomes a guideline for use in development of the land use element to achieve noise compatible land uses and also to provide baseline levels and noise source identification for local noise ordinance enforcement...

This noise element also includes the preparation of a community noise exposure inventory, current and projected, which identifies the number of persons exposed to various levels of noise throughout the community.

The noise element also recommends mitigating measures and possible solutions to existing and foreseeable noise problems.

It shall be the responsibility of the local agency preparing the general plan to specify the manner in which the noise element will be integrated into the City or county's zoning plan and tied to the land use and circulation elements and to the local noise ordinance. The noise element, once adopted shall also become the guideline for determining compliance with the State's noise insulation standards, as contain in the Section 1092 of Title 25 of the California Administrative Code.

B. FUNDAMENTALS OF NOISE

The various terms used in this Element are defined as follows:

- dBA - A measure of sound level; the 'dB' denotes decibels, the 'A' denotes a weighting that results in a noise measurement which approximates the frequency response of the human ear.
- L_{eq} - Equivalent sound level; dBA values averaged on an energy basis over a stated time period.
- $L_{eq}(24)$ - The L_{eq} of a 24-hour period.
- L_{dn} - Day-night average sound level; same as $L_{eq}(24)$ except that the night-time (10:00 p.m. to 7:00 a.m.) levels are weighted by 10 dB, reflecting a person's increased sensitivity to noise at night. (A 10 dB increase is judged twice as loud.)
- CNEL - Community Noise Equivalent Level; same as L_{dn} except in addition to the 10 dB night-time weighting, the evening (7:00 p.m. to 10:00 p.m.) levels are weighted by 5 dB. For most situations, the L_{dn} and CNEL will be equal within a fraction of a dB, and may be considered synonymous.
- Ambient - When used in connection with sound level, refers to the prevailing background noise, exclusive of a particular intruding sound under consideration.
- Contour - When used in connection with noise, refers to a line of constant sound level; similar to contours of constant elevation on a geological map.

1. Noise Rating Schemes

Noise levels are measured on a logarithmic scale in decibels. The measurements are then weighted and added over a specified time period to reflect not only the magnitude of the sound, but also its duration, frequency, and time of occurrence. In this manner, various acoustical scales and units of measurement have been developed such as: equivalent sound levels (L_{eq}), day-night average sound levels (M_n), Community Noise Equivalent Levels (CNEL's), and Single Event Noise Exposure Levels (SENEL's).

A-weighted decibels (dBA) approximate the subjective response of the human ear to a broad frequency noise source by discriminating against the very low and high frequencies of the audible spectrum. They are essentially adjusted to reflect only those frequencies audible to the human ear. The decibel scale has a value of 1.0 dBA at the threshold of hearing and 140 dBA at the threshold of pain. Each interval of 10 decibels indicates a sound energy ten times greater than before, which is perceived by the human ear as being roughly twice as loud.

Examples of the decibel level of various noise sources are shown in Figure 1. They include: the quiet rustle of leaves (10 dBA), a library (35 dBA), normal conversation at 5 feet (55 dBA), a busy street at 50 feet (75 dBA), or a power motor at 3 feet (105 dBA).

Equivalent sound levels are not measured directly. They are calculated from sound pressure levels typically measured in A-weighted decibels (dBA). The equivalent sound level (L_{eq}) is the constant level that, over a given time period, transmits in the same amount of acoustic energy as the actual time-varying sound. Equivalent sound levels are the basis for both the Mn and CNEL scales.

Day-night average sound levels are a measure of the cumulative noise exposure of the community. The Mn value results from a summation of hourly L_{eq} 's over a 24-hour time period with an increased weighing factor applied to the night time period between 10:00 p.m. and 7:00 a.m. This noise-rating scheme takes into account those subjectively more annoying noise events, which occur during the normal sleeping hours.

Community Noise Equivalent Levels (CNEL) also carry a weighing penalty for noises that occur during the night time hours. In addition, CNEL levels include a penalty for noise events that occur during the evening hours between 7:00 p.m. and 10:00 p.m. Because of the weighing factors applied, CNEL values at a given location will always be larger than Mn values, which in turn will exceed L_{eq} values. Experience with many noise sources has shown that these two indices consistently agree within 1.0 dB. Consequently, CNEL and Mn values are sometimes used interchangeably in planning documents.

The Single Event Noise Exposure Level (SENEL) is the most appropriate noise level-duration rating scale for a single noise occurrence. The SENEL, given in decibels, is the noise exposure level of a single event measured over the time interval between the initial and final times for which it exceeds the threshold noise level. A single event is a solitary occurrence of noise exposure such as train passby or an aircraft overflight.

2. Sound Propagation

Noise sources may either be a "line source" (e.g., a heavily traveled highway) or a "point source" (e.g., a stationary engine or compressor). Highway traffic noise on high volume roadways simulates a "line source" and the drop-off rate of sound with distance approaches "cylindrical spreading" wherein a nominal 3.0 dBA drop with each doubling of distance between the noise source and the noise receiver occurs.

Environmental factors such as the wind direction and speed, temperature gradients, the characteristics of the ground (hard or soft) and the air (relative humidity), the presence of grass, shrubbery, and trees, often combine to increase the actual attenuation achieved outside laboratory conditions to 4.5 decibels per doubling of distance. Thus, a noise level of 74.5 decibels at 50 feet from a highway centerline would attenuate to 70.0 decibels at 100 feet, 65.5 decibels at 200 feet, and so forth.

FIGURE 1

Typical Noise Levels of Familiar Sources

SOUND LEVELS AND LOUDNESS OF ILLUSTRATIVE NOISES IN INDOOR AND OUTDOOR ENVIRONMENTS
(A-Scale Weighted Sound Levels)

SOUND LEVELS AND LOUDNESS OF ILLUSTRATIVE NOISES IN INDOOR AND OUTDOOR ENVIRONMENTS
(A-Scale Weighted Sound Levels)

dB(A)	OVER-ALL LEVEL Sound Pressure Level Approx. 0.0002 Microbar	COMMUNITY (Outdoor)	HOME OR INDUSTRY	LOUDNESS Human Judgement of Different Sound Levels
130	UNCOMFORTABLY	Military Jet Aircraft Take-Off With After-burner From Aircraft Carrier @ 50 Ft (130)	Oxygen Torch (121)	120 dB(A) 32 Times as Loud
120 110	LOUD	Turbo-Fan Aircraft @ Take Off Power @ 200 Ft (90)	Riveting Machine (110) Rock-N-Roll Band (108-114)	110 dB(A) 16 Times as Loud
100	VERY	Jet Flyover @ 1000 Ft (103) Boeing 707, DC-8 @ 6080 Ft Before Landing (106) Bell J-2A Helicopter @ 100 Ft (100)		100 dB(A) 8 Times as Loud
90	LOUD	Power Mower (96) Boeing 737, DC-9 @ 6080 Ft Before Landing (97) Motorcycle @ 25 Ft (90)	Newspaper Press (97)	90 dB(A) 4 Times as Loud
80		Car Wash @ 20 Ft (89) Prop. Airplane Flyover @ 1000 Ft (88) Diesel Truck, 40 MPH @ 50 Ft (84) Diesel Train, 45 MPH @ 100 Ft (83)	Food Blender (88) Milling Machine (85) Garbage Disposal (80)	80 dB(A) 2 Times as Loud
70	MODERATELY LOUD	High Urban Ambient Sound (80) Passenger Car, 65 MPH @ 25 Ft (77) Freeway @ 50 Ft From Pavement Edge, 10:00 AM (76 +or- 6)	Living Room Music (76) TV-Audio, Vacuum Cleaner	70 dB(A)
60		Air Conditioning Unit @ 100 Ft (60)	Cash Register @ 10 Ft (65-70) Electric Typewriter @ 10 Ft (64) Dishwasher (Rinse) @ 10 Ft (60) Conversation (60)	60 dB(A) 1/2 as Loud
50	QUIET	Large Transformers @ 100 Ft (50)		50 dB(A) 1/4 as Loud
40		Bird Calls (44) Lower Limit Urban Ambient Sound (40)		40 dB(A) 1/8 as Loud
	JUST AUDIBLE	(dB(A) Scale Interrupted)		
10	THRESHOLD OF HEARING			

SOURCE: Reproduced from Melville C. Branch and R. Dale Bell Outdoor Noise in the Metropolitan Environment.
Published by the City of Los Angeles, 1970, p.2.

This is particularly true where the view of the roadway is interrupted by isolated buildings, clumps of bushes, scattered trees, or the intervening ground is soft or covered with vegetation and the source or receiver is located more than 3 meters above the ground. It should be noted, however, that the nominal value of 3.0 dBA with doubling applies to sound propagation from a "line source": (1) over the top of a barrier greater than 3 meters in height, or (2) when there is a clear unobstructed view of the highway, the ground is hard, there are no intervening structures, and the height of the line-of-sight averages more than 3 meters above the ground.

In an area which is relatively flat and free of barriers, the sound resulting from a single "point of source" of noise spreads in a spherical manner away from the source and drops by 6 decibels for each doubling of distance or 20 decibels for each factor of ten in distance. This applies to fixed noise sources and mobile noise sources which are temporarily stationary such as an idling truck or other heavy duty equipment operating within a confined area (such as industrial processes). Sound attenuation from a train resembles a line source near the railroad tracks and a point source at distances beyond three-tenths of the train length.

The noise level adjacent to the line sources of noise such as roadways increase by 3.0 dBA with each doubling in the traffic volume (provided that the speed and truck mix do not change). From the mathematical expression relating increases in the number of noise sources (motor vehicles) to the increase in the adjacent noise level, it can be shown that a 26 percent increase in the traffic volume will cause a 1.0 dBA increase in adjacent noise levels. Doubling the number of vehicles on a given route increases the adjacent noise levels by 3.0 dBA, but changing the vehicle speed has an even more dramatic effect.

Increasing the vehicle speed from 35 to 45 mph raises the adjacent noise levels approximately 2.5 dBA. Reducing vehicle speeds from 35 to 30 mph decreases adjacent noise levels by 1.5 dBA on major roadways and 1.6 dBA on secondary and collector roadways. A speed decrease from 40 mph to 35 mph reduces adjacent noise levels by 1.3 dBA on majors and 1.4 dBA on secondaries and collectors. Consequently, lowering motor vehicle speeds can have a significant positive impact in terms of reducing adjacent noise levels.

The truck mix on a given roadway also has a significant effect on the adjacent noise levels. As the number of trucks increases and becomes a large percentage of the total vehicle volume, the adjacent noise levels increase. This effect is more pronounced if the number of heavy-duty (3+ axle) trucks is large when compared to the number of medium duty (2 axle) trucks.

Noise levels adjacent to roadways vary with the volume of traffic, the mean vehicular speed, the truck mix, and the road cross-section. Figure 2 provides a nomograph for each roadway type which allows the CNEL at either 50 or 100 feet to be determined from the daily two-way traffic volume and the speed of the

vehicles. For example, a major arterial carrying 33,000 ADT with a posted speed limit of 40 mph would generate approximately 66.9 CNEL at 100 feet. Lowering the speed to 35 mph reduces the CNEL at 100 feet by 1.3 dBA to 65.6 dBA. At a speed of 45 mph, the noise level at 100 feet would be 68.1 CNEL (1.2 dBA higher than at 40 mph).



FIGURE 2

Typical Noise Levels Versus Speed and Volume

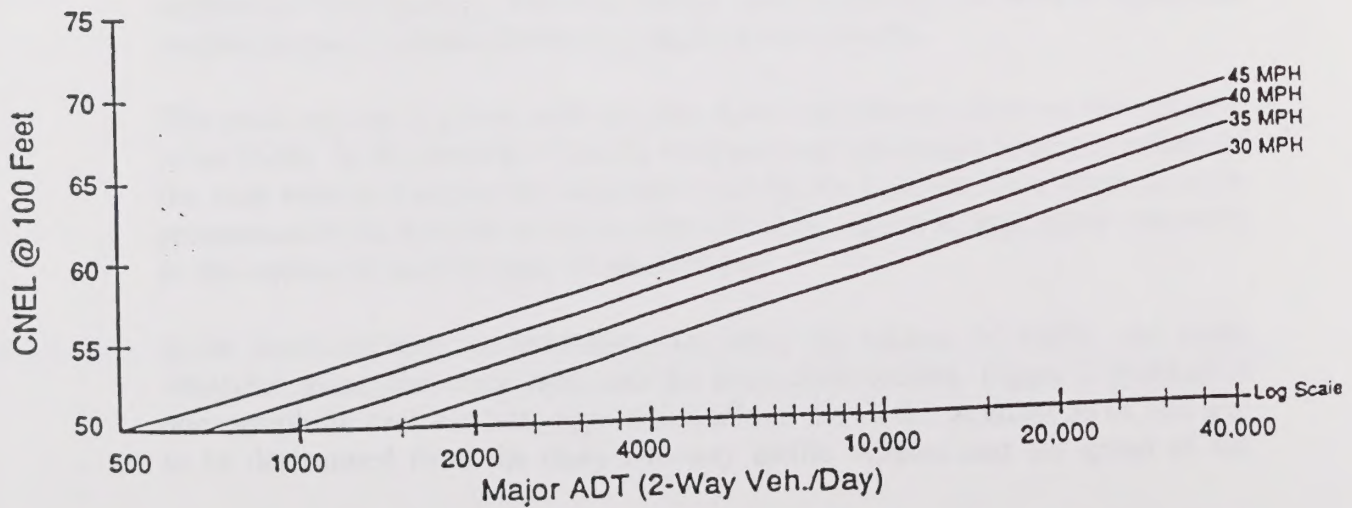
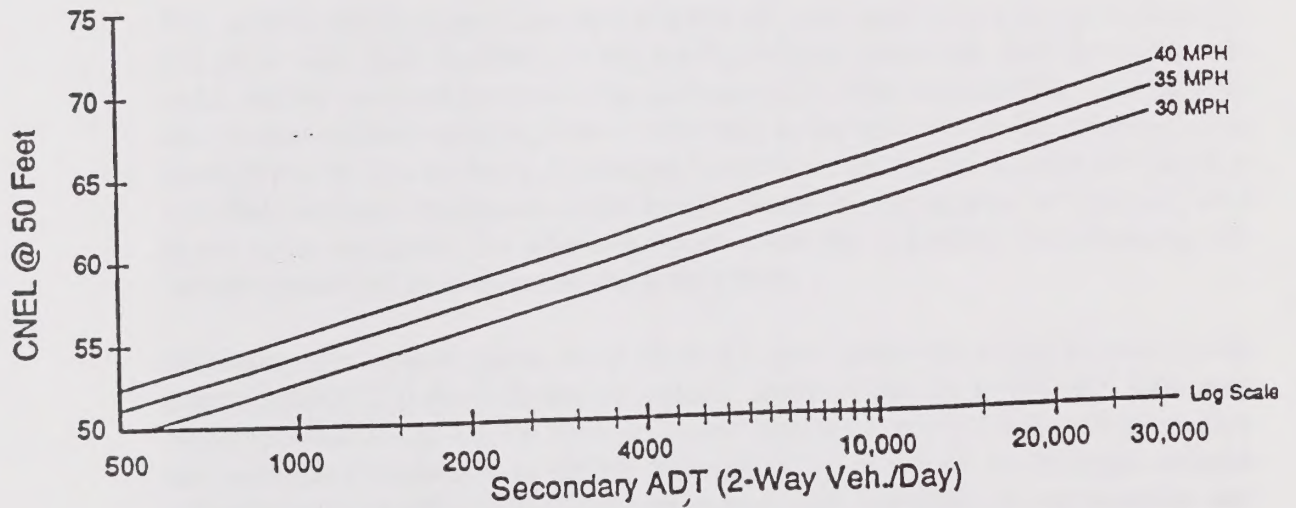
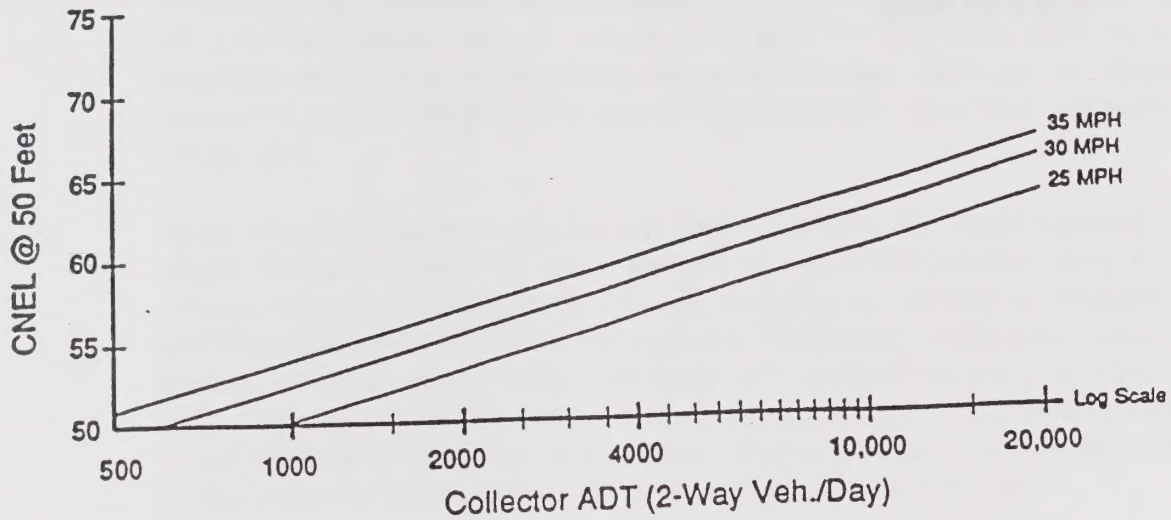
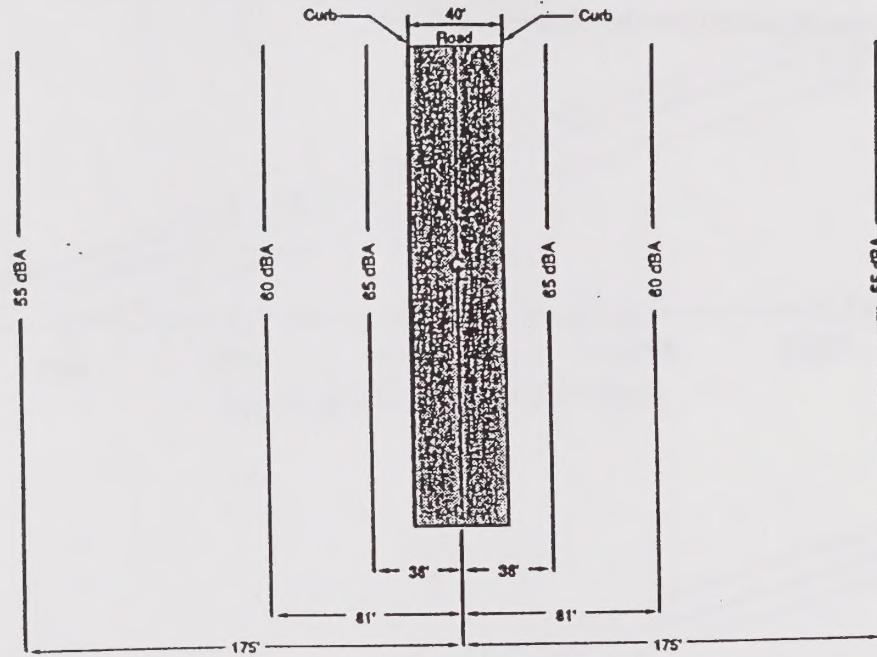


Figure 3 provides design noise levels adjacent to typical major, secondary and collector roadways. The nomographs assume traffic volumes equivalent to the daily design capacity (at the upper limit of level of service D) for each roadway type as well as typical design speeds and a truck mix of 4.0 percent for major arterials and 2.58 percent for secondary and collector streets. These exhibits can be used as a general guide for planning purposes to determine the potential "worst case" future noise levels and the setbacks needed to insure an acceptable noise environment for the planned land uses.

FIGURE 3

Typical Design Noise Contours

Collector Roadway



Secondary Highway

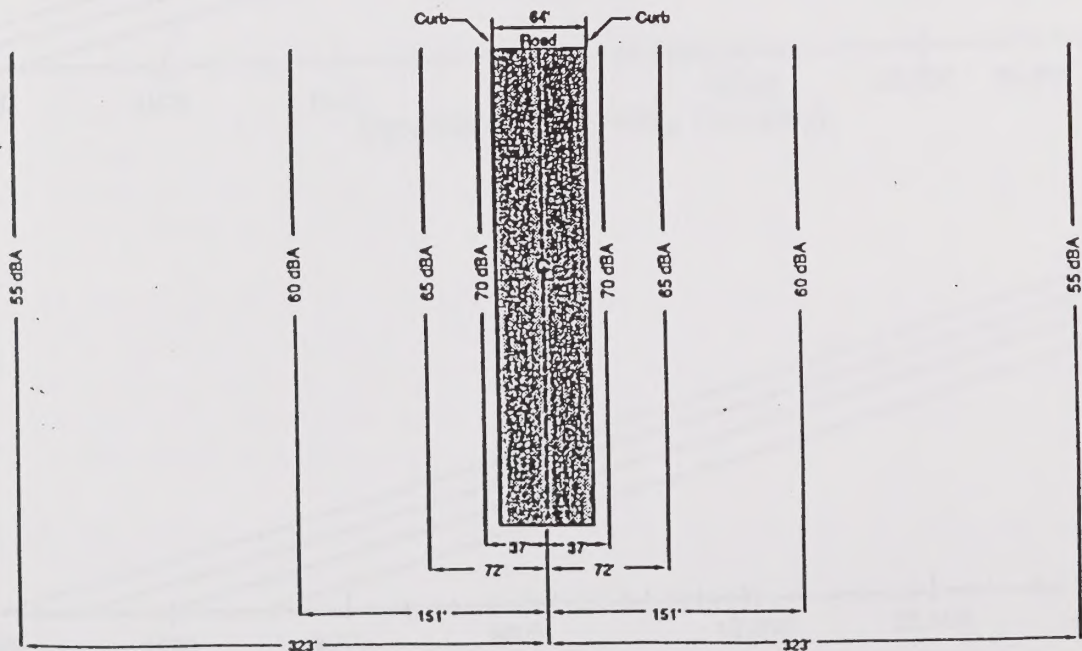
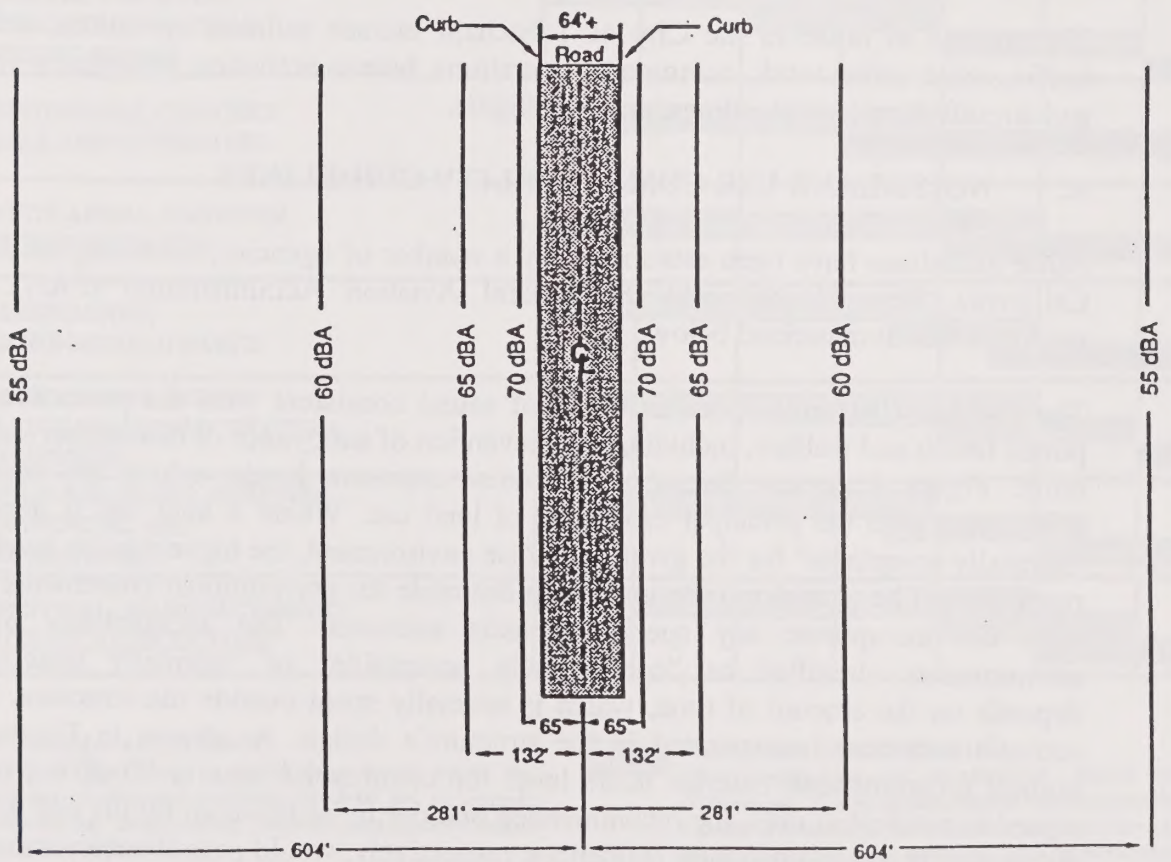


FIGURE 3
(continued)

Typical Design Noise Contours
Major Highway



II. PERSPECTIVE ANALYSIS

The noise environment in the City of Tehachapi results from a number of sources, which provide sound as a characteristic of their activity. The effects of the surrounding sound levels on land uses or humans depend on the spatial and temporal distribution of the noise source. Among the effects of noise on people are annoyance, inconvenience, pain, and serious hearing damage. The degree to which there is annoyance and/or activity interference depends upon the magnitude of the intruding noise level, frequency with which it occurs, and time of day of occurrence. There is a consensus among many of the government agencies responsible for establishing noise standards and criteria that the day-night average sound level is the preferred unit of noise exposure for use in assessing the potential impact of an intruding noise source. The day-night sound level (M_n) represents an average of the A-weighted noise levels occurring during a complete 24-hour period; however, it includes a weighting applied to those noises occurring during nighttime (10 p.m. to 7 a.m.) hours.

The sources of noise in the City of Tehachapi include railroad operations, vehicular traffic, construction work, commercial operations, human activities, emergency vehicles, and aircraft departures, landings, and overflights.

A. NOISE/LAND USE COMPATIBILITY GUIDELINES

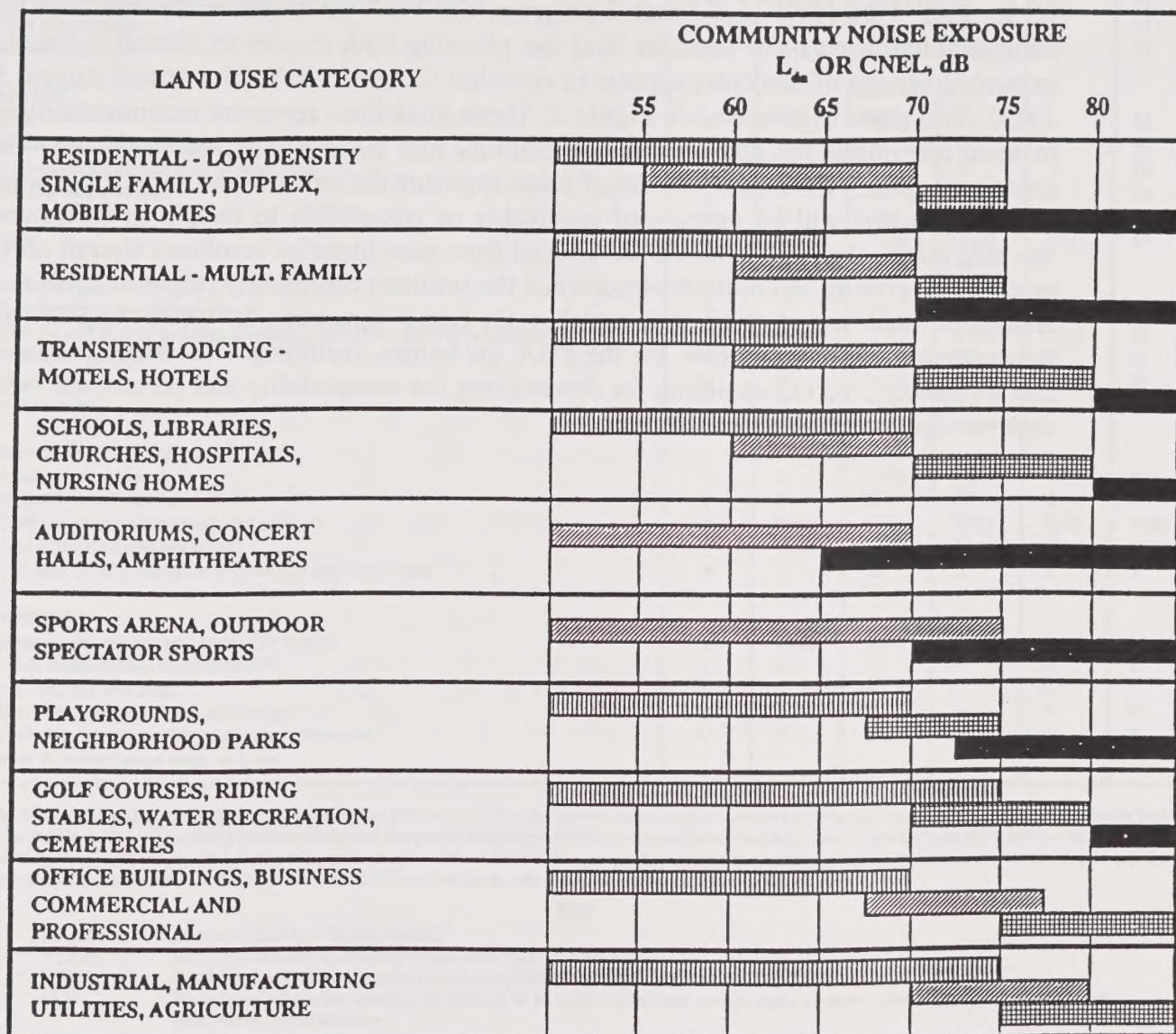
Noise guidelines have been established by a number of agencies, including the State of California, Kern County, and the Federal Aviation Administration (FAA). These guidelines are summarized below.

The State of California specifies levels of sound consistent with the protection of the public health and welfare, including the prevention of annoyance or discomfort caused by noise. Figure 4 depicts the ranges of noise exposure levels, which are considered compatible with the principal categories of land use. Where a land use is denoted as "normally acceptable" for the given M_n noise environment, the highest noise level in that range should be considered the maximum desirable for conventional construction which does not incorporate any special acoustic treatment. The acceptability of noise environments classified as "conditionally acceptable" or "normally unacceptable" depends on the amount of time, which is normally spent outside the structure, and the acoustic treatment incorporated in the structure's design. As shown in Figure 4, the highest recommended exterior noise level for commercial uses is 70 dBA M_n . With regard to residential uses, the recommended outdoor noise limits of 60 dB and 65 dB for single-family and multi-family residences, respectively, would permit achievement of the 45 dB interior noise level recommended by Federal and State standards. This level would result from the noise reduction associated with typical residential construction, which ranges from 12 to 18 dB (with windows partially open).

Kern County recently amended its Noise Element of the County General Plan, and established an exterior noise level standard of 65 dB L_{dn} and an interior noise level standard of 45 dB L_{dn} for residential land uses.

FIGURE 4

Land Use Compatibility



NORMALLY ACCEPTABLE

Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.



CONDITIONALLY ACCEPTABLE

New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.



NORMALLY UNACCEPTABLE

New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.



CLEARLY UNACCEPTABLE

New construction or development should generally not be undertaken.

Source: California Office of Noise Control

Federal Aviation Administration The Aviation Safety and Noise Abatement Act of 1979 (PL 96-193, 49 USC 2101) required that the FAA establish a single system for measuring and evaluating noise impacts. This system is based upon the A-weighted decibel. As part of the FAR Part 150 Noise Control program, the FAA published noise and land use compatibility charts to be used for land use planning with respect to aircraft noise. An expanded version of this chart appears in Aviation Circular 150/5020-1 (dated August 5, 1983). This chart is presented in Figure 5. These guidelines represent recommendations to local authorities for determining acceptability and permissibility of land uses. The guidelines specify maximum amount of noise exposure (in terms of the cumulative noise metric L_{DN}) that will be considered acceptable or compatible to people in living and working areas. These noise levels are derived from case histories involving aircraft noise problems at civilian and military airports and the resultant community response. Note that residential land use is deemed acceptable for noise exposures up to 65 $L_{DN}/CNEL$. Several important notes appear for the FAA guidelines, including one, which indicates that ultimately "the responsibility for determining the acceptability and permissible land uses remains with the local authorities."

LAND USE	Yearly Day-Night Average Sound Level (L_{dn}) in Decibels					
	Below 65	65-70	70-75	75-80	80-85	Over 85
Residential						
Residential, other than mobile homes and transient lodgings	Y	N(1)	N(1)	N	N	N
Mobile home parks	Y	N	N	N	N	N
Transient lodgings	Y	N(1)	N(1)	N(1)	N	N
Public Use						
Schools	Y	N(1)	N(1)	N	N	N
Hospitals and nursing homes	Y	25	30	N	N	N
Churches, auditoriums, and concert halls	Y	25	30	N	N	N
Governmental services	Y	Y	25	30	N	N
Transportation	Y	Y	Y(2)	Y(3)	Y(4)	Y(4)
Parking	Y	Y	Y(2)	Y(3)	Y(4)	N
Commercial Use						
Offices, business and professional	Y	Y	25	30	N	N
Wholesale and retail—building materials, hardware and farm equipment	Y	Y	Y(2)	Y(3)	Y(4)	N
Retail trade—general	Y	Y	25	30	N	N
Utilities	Y	Y	Y(2)	Y(8)	Y(4)	N
Communication	Y	Y	25	30	N	N
Manufacturing And Production						
Manufacturing, general	Y	Y	Y(2)	Y(3)	Y(4)	N
Photographic and optical	Y	Y	25	30	N	N
Agriculture (except livestock) and forestry	Y	Y(6)	Y(7)	Y(8)	Y(8)	Y(8)
Livestock farming and breeding	Y	Y(6)	Y(7)	N	N	N
Mining and fishing, resource production and extraction	Y	Y	Y	Y	Y	Y
Recreational						
Outdoor sports arenas and spectator sports	Y	Y(5)	Y(5)	N	N	N
Outdoor music shells, amphitheaters	Y	N	N	N	N	N
Nature exhibits and zoos	Y	Y	N	N	N	N
Amusements, parks, resorts and camps	Y	Y	Y	N	N	N
Golf courses, riding stables and water recreation	Y	Y	25	30	N	N
Number in parentheses refer to notes.						

*The designations contained in this table do not constitute a Federal determination that any use of land covered by the program is acceptable or unacceptable under Federal, State, or local law. The responsibility for determining the acceptable and permissible land uses and the relationship between specific properties and specific noise contours rests with the local authorities. FAA determinations under Part 150 are not intended to substitute federally determined land uses for those determined to be appropriate by local authorities in response to locally determined needs and values in achieving noise compatible land uses.

KEY

SLUCM	Standard Land Use Coding Manual.
Y (Yes)	Land Use and related structures compatible without restrictions.
N (No)	Land Use and related structures are not compatible and should be prohibited.
NLR	Noise Level Reduction (outdoor to indoor) to be achieved through incorporation of noise attenuation into the design and construction of the structure.
25, 30, or 35	Land Use and related structures generally compatible; measures to achieve NLR or 25, 30 or 35 dB must be incorporated into design and construction of structure.

NOTES

- (1) Where the community determines that residential or school uses must be allowed, measures to achieve outdoor to indoor Noise Level Reduction (NLR) of at least 25 dB and 30 dB should be incorporated into building codes and be considered in individual approvals. Normal residential construction can be expected to provide a NLR of 20 dB, thus, the reduction requirements are often stated as 5, 10 or 15 dB over standard construction and normally mechanical ventilation and closed windows year round. However, the use of NLR criteria will not eliminate outdoor noise problems.
- (2) Measures to achieve NLR of 25 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.
- (3) Measures to achieve NLR of 30 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.
- (4) Measures to achieve NLR of 35 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.
- (5) Land use compatible provided special sound reinforcement systems are installed.
- (6) Residential buildings require an NLR of 25.
- (7) Residential buildings require an NLR of 30.
- (8) Residential building not permitted.

LOCKMAN & ASSOCIATES
CONSULTING ENGINEERS & PLANNERS

Figure 5

FAA Noise Guidelines
Noise Element

Source: FAA, Part 150, 1989

B. LAND USE SENSITIVITY TO NOISE

Some land uses are more tolerant of noise than others. For example, schools, hospitals, churches and residences are more sensitive to noise intrusion than commercial or industrial activities. For this reason, land use compatibility with the noise environment is an important consideration in the planning and design of new developments. As ambient noise levels affect the perceived amenity or livability of a development, so too can the mismanagement of noise impacts impair the economic health and growth potential of a community by reducing the area's desirability as a place to live, shop and work.

Planned land use compatibility with environmental noise requires identification of noise-sensitive uses. These are listed in Table 1. In addition, best use of land requires identification of those situations where a noise-sensitive use can be made compatible with a noise environment by ameliorating techniques.

Land uses deemed noise sensitive by the State of California include schools, hospitals, rest homes, long-term care and mental care facilities. Some jurisdictions elect to also consider day care centers, single family dwellings, mobile home parks, churches, libraries, and recreation areas sensitive to noise. Moderately sensitive land uses typically include: multi-family dwellings, hotels, motels, dormitories, out-patient clinics, cemeteries, golf courses, country clubs, athletic/tennis clubs, and equestrian clubs. Relatively insensitive uses are business, commercial, and professional developments. Insensitive noise receptors include industrial, manufacturing, utilities, agriculture, natural open space, undeveloped land, parking lots, motorcycle parks, rifle ranges, warehousing, liquid and solid waste facilities, salvage yards, and transit terminals.

Current land uses located within the City of Tehachapi that are sensitive to intrusive noise include schools and preschools, hospitals and other medical facilities, and parks. The Noise Sensitive Receptors located within the City are identified in Table 1.

The City of Tehachapi Noise Element Update deals with both of the above requirements through a system of classification of land uses by noise-sensitivity ameliorating techniques.

1. Sensitive Land Uses

Sensitive land uses are sub-classified as:

- a. Sensitive - those users where a quiet outdoor environment is important to health and quality of life. This category includes residential uses which feature an outdoor lifestyle; convalescent uses where the outdoor environment is important and parks which are relaxation-oriented.
- b. Conditionally Sensitive - uses which are noise-sensitive but which can be made compatible to a more severe noise environment by noise insulation features in building construction, and/or noise abatement techniques of layout, shielding,

barriers, topography, etc. Uses which can meet the above criteria, under appropriate controlling conditions, include residential uses not featuring outdoor life styles, schools, churches, and general hospitals.

TABLE 1

Noise Sensitive Receptors

HOSPITALS/MEDICAL FACILITIES

Tehachapi Hospital
115 West "E" Street

Sierra Family Care
20797 Santa Lucia

Hilin Professional Bldg.
432 South Mill Street

Private Practice Physicians
20909 South Street
329 West "C" Street
116 West "E" Street

SOCIAL SERVICES

Tehachapi Community Counseling Service
125 East "F" Street

Tehachapi Pregnancy Crisis Center
F Street

SENIOR CENTER

Tehachapi Senior Center
500 East "F" Street

PARKS

West Park
City Park
North Park
Meadowbrook Park
Railroad Park
Benz Visco Park

SCHOOLS

Tehachapi Unified Schools

Tehachapi High School
711 Anita Drive

Monroe Continuation High School
711 Anita Drive

Summit High School
400 South Robinson Street

Jacobsen Junior High
126 Snyder Avenue

Wells Elementary School
300 South Robinson Street

Tompkins Elementary School
1120 South Curry Street

Golden Hills Elementary
20215 Park Road

Cummings Valley Elementary
24220 Bear Valley Road

Private Schools

Honey Tree Preschool
490 West "D" Street

Kindle Christian School
48505 Valley Boulevard

Sunshine Place Preschool
19016 Highline Road

Tehachapi Christian School
213 East "E" Street

Highland Christian School
1049 S. Curry Street

Troeffers Kiddy Ranch
Tehachapi Woodford Road

Good Shepherd Lutheran Church Preschool
329 South Mill Street

c. Non-sensitive Land Uses

Uses where a quiet outdoor environment is not critical to indoor or outdoor activities. Included are most commercial uses, industrial uses, parks that are sports oriented, playgrounds, and land devoted to transportation systems. Without implying that noise mitigating considerations are not to be applied in the planning for these land uses, these uses are classified as "non-sensitive".

C. NOISE SENSITIVITY STANDARDS AND CRITERIA

Noise level standards are designated for three noise sensitivity land use classifications. These are presented in Table 2. The criteria developed by the Environmental Protection Agency (EPA) are issued as information only, not as standards, and are the levels deemed "requisite to protect health and welfare with an adequate margin of safety". The EPA cautions that the criteria "do not take into account cost or feasibility", and that "states and localities will approach this information according to individual needs and situations".

Noise levels were measured adjacent to sensitive receptors at various locations throughout the City. The types of sensitive receptors included a park, school, hospital, and senior housing development. Measurement site locations are described in Table 3. This table shows that the school experiences exterior peak hour noise levels that appear to be undesirable for outdoor educational uses. Interior noise levels at these locations are also of concern. However, the noise levels in Table 3 represent the evening peak hour when schools are not typically in session.

TABLE 2

Use Sensitivity Noise Standards

Land Use Sensitivity Classification	Exterior Noise Standard	Interior Noise Standard
Sensitive	L_{dn} 65	L_{dn} 55
Conditionally Sensitive	L_{dn} 75	L_{dn} 55
Non-Sensitive	L_{dn} 75	L_{dn} 75

TABLE 3

Existing Exposure Levels at Noise Sensitive Receptors

Site Number	Distance to Centerline (ft.)	Receptor Type	L_{eq} ¹ (dBA)
1	170	School	56.2
2	70	Park	53.9
3	115	Hospital	57.4
4	1350	Senior Housing	45.4

1. The noise level is adjusted to reflect maximum one hour L_{eq} values based upon the peak hour traffic volume compared to the traffic volume during the noise measurement period.

III. PRESENT AND FUTURE NOISE SOURCES

The two types of noise sources which should be considered are stationary and mobile noise sources. Fixed sources of noise in Tehachapi include: industrial and construction activities, air conditioning/refrigeration units, whistles or bells (signaling breaks or shift changes), high level radio, stereo or television usage, power tools, lawnmowers, appliances used in the home, and barking dogs. Mobile noise sources are typically transportation-related and include airplanes, helicopters, trains, automobiles, trucks, buses, motorcycles, and off-road vehicles.

Although construction activities associated with public works projects or private development occur throughout the City, they are localized and temporary. With the exception of some industrial areas, many of the fixed sources of noise are typically accepted as part of the ambient or background noise level.

A. STATE ROUTE 58

State Route 58 carries appreciable volumes of both truck and commuter traffic. The 1989 traffic counts obtained from Caltrans District 9 for Highway 58 (2 way) are as follows:

Broome Road to State Route 202	15,000
Highway 202 to Mill Street	16,500
Mill Street to Summit	14,400
Summit to Sand Canyon	13,800
Sand Canyon to Cameron Canyon	13,500

The exterior noise environment of land uses adjacent to State Route 58 are affected by motor vehicle noise on the highway. The (1988) 60 dB L_{dn} and 65 dB L_{dn} noise exposure contours are located at 713 feet, and at 331 feet, respectively, from the highway centerline.

Noise emission standards for both diesel trucks and buses are regulated at the Federal level by the Environmental Protection Agency. Because of the intensive effort being applied at the Federal level in the quieting of diesel trucks, noise generated by these vehicles can be expected to drop by as much as 10 dB within the next decade. Increased traffic flow, however, has the effect of increasing the L_{dn} by about 3 dB for each doubling in traffic flow.

B. UNION PACIFIC RAILROAD

Locomotive noise and short warning horn use are the major contributors to railroad noise levels in the City. Rail traffic operations on the Union Pacific (UPRR) line in 1990 included approximately 36 trains per day, all on an unscheduled basis. According to information from UPRR, freight trains are randomly distributed throughout the daytime and nighttime hours. Information on future operations was not available.

Railroad noise measurements were conducted in 1990 to determine a typical sound exposure level (SEL) for railroad line operations, accounting for the effects of local topography, climate and other factors, which may affect noise generation. To relate railroad operational data to the applicable exterior noise level standards, the L_{dn} for typical freight train operations was calculated. Predicted distances from the railroad track centerline to the 60, 65 and 70 dB L_{dn} are shown in Table 4. These measurements are considered representative of the existing railroad noise environment.

TABLE 4

Predicted Railroad Noise Levels

Distance To		
<u>70 dB L_{dn}</u>	<u>65 dB L_{dn}</u>	<u>60 dB L_{dn}</u>
144 feet	309 feet	666 feet

C. TEHACHAPI MUNICIPAL AIRPORT

Single event noise levels from aircraft arrivals and departures may cause sleep disturbance. The noise level at which sleep stage change or interruption occurs is highly individualized. A person's level of sleep is dependent on many factors including fatigue, exhaustion, stress, room temperature, bed comfort and noise level in the room. For these reasons, a single number criterion for the evaluation of sleep interference has not been established.

Within the General Plan boundaries, there are two airports, the Tehachapi Municipal Airport, a general aviation, public use airport; and the Mountain Valley Airport, a privately owned glider airport.

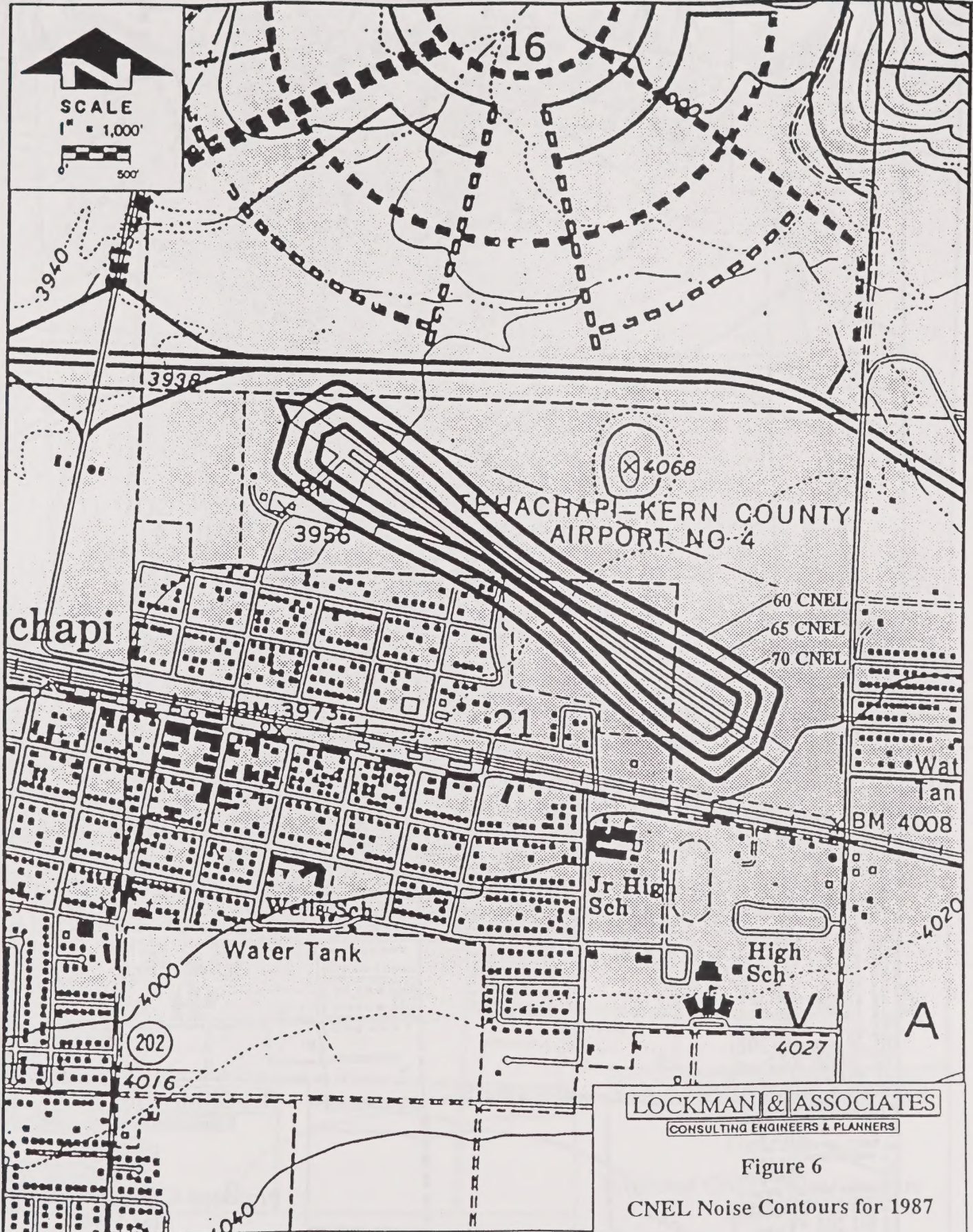
There were a total of 90 based aircraft at the Tehachapi Municipal Airport in 1990. Typically, types of based aircraft include single engine piston (80-90%), multi engine piston (6-8%) and others. Annual operations (between June 1990 and July 1991) totaled 8,805 operations.

Community Noise Equivalent Level (CNEL) contours was developed for the Tehachapi Airport as part of the Master Plan. The noise contours are based on data regarding typical aircraft operating procedures and meteorological conditions. The 60, 65, and 70 dBA contours for the 1987 level of operations are shown in Figure 6. All of the area within the 65 CNEL contour is airport property. The 60 CNEL contour extends beyond the airport property in a small area near the midfield, which is presently used for aviation purposes. No residential or other sensitive land uses are impacted by aircraft noise according to State Noise Regulations or other related guidelines.

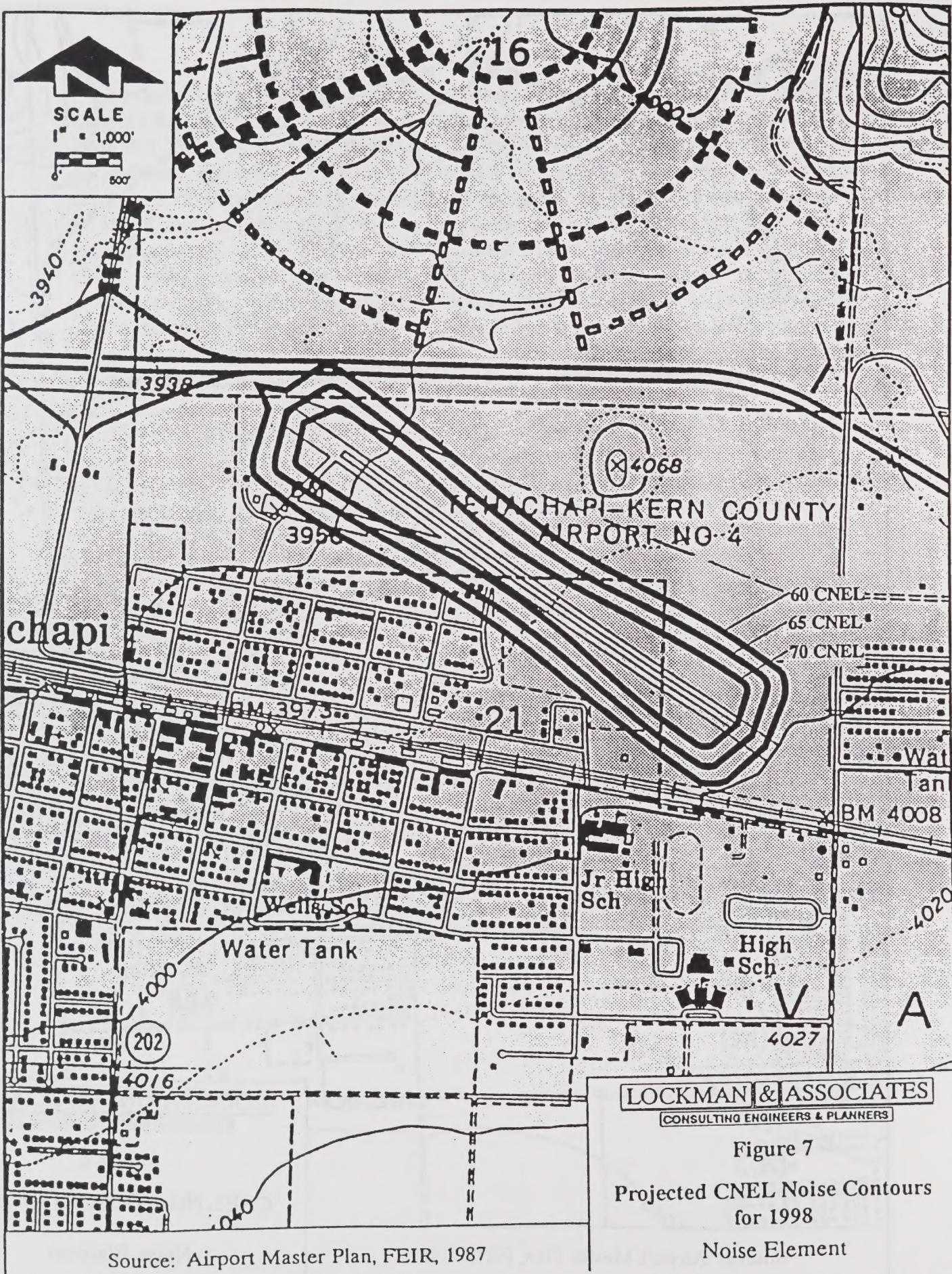
Future aircraft noise contours were also developed to estimate the impact of the Airport Master Plan on surrounding land uses. Figure 7 depicts the location of the 60, 65, and 70 dB CNEL contours for 1998, and Figure 8 depicts contours projected for the year 2008. As indicated, the 1998, 65 CNEL contour was anticipated to extend beyond the airport property at midfield, but was not anticipated to extend onto residential property. It should be noted that airport activity has not significantly increased from the 1987 level of operation in spite of the projections made in the Master Plan. By the year 2008, the 65 CNEL noise contours will move outward to approximately intersect two residential properties closest to the airport. Several residential properties it is projected will be within the 60 CNEL contour by the year 2008, however, the California Noise Regulations are met at these properties, which are also considered compatible according to Federal Housing and Urban Development (HUD) and FAA guidelines.

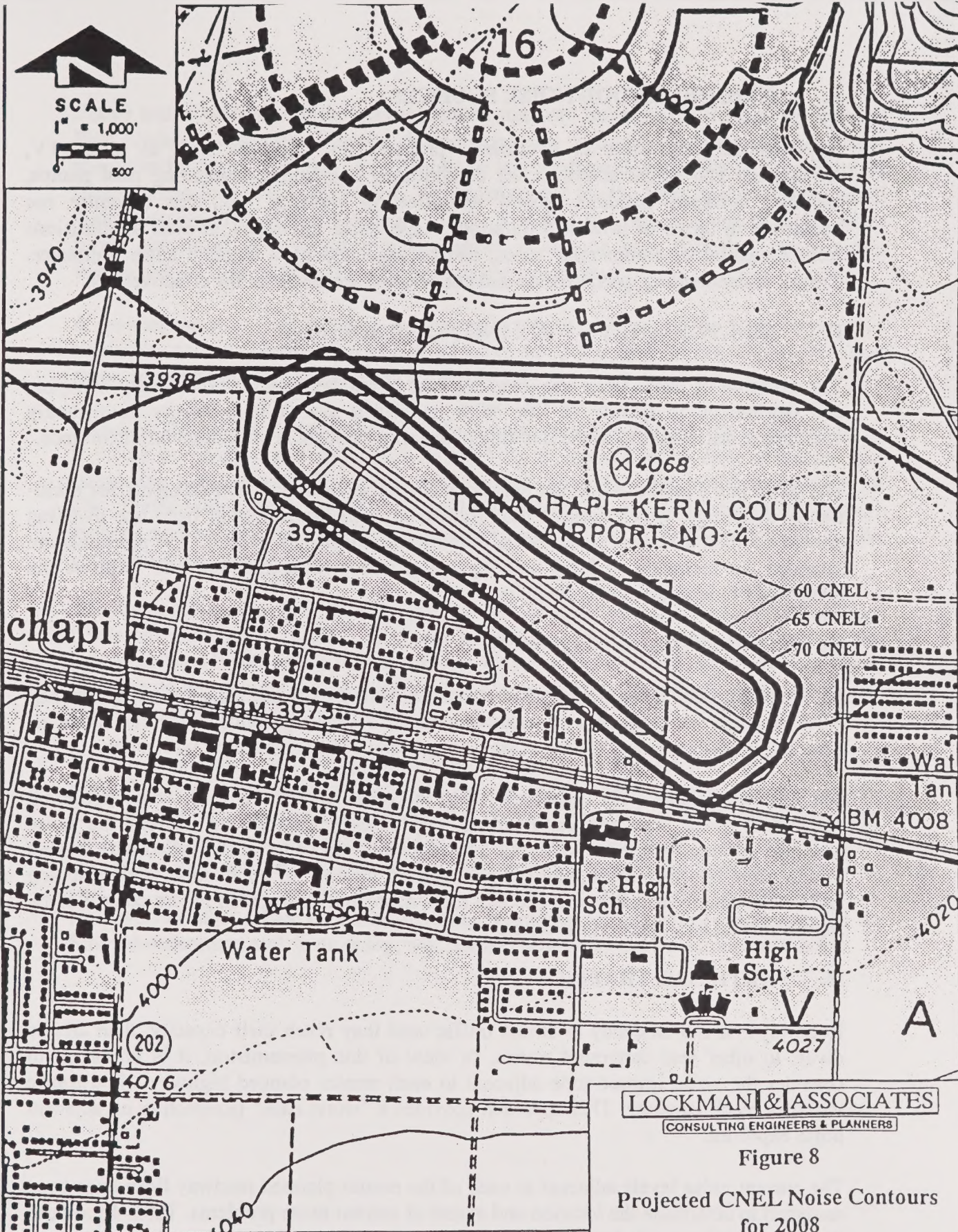
D. CONSTRUCTION AND MAINTENANCE EQUIPMENT

At the present time, the only means available to the City of Tehachapi for controlling noise emanating from construction and maintenance equipment is through regulation of hours of use. These sources are significant contributors to community noise exposure, and are to be subject to Federal regulation. "Quiet" jackhammers, tampers, and air compressors are currently available or under development. In its own procurement actions, the City can include noise criteria, regulate time of operation, or give preference to quieter products.



Source: Airport Master Plan, FEIR, 1987





E. NEIGHBORHOOD NOISE SOURCES

Noise appears allowable at a citizen's property line. Sources such as radio, TV, recreational and social activities, air conditioning equipment, swimming pool pumps, animals, hawkers, peddlers, sound amplification systems, etc., are currently not quantified in terms of level and duration. These noise intrusions, as well as intrusions from industrial or commercial zones, can be regulated by a suitable noise ordinance. Citizen understanding, participation and cooperation are essential for effectiveness.

F. MULTI-FAMILY DWELLING NOISE SOURCES

Transmission of noise from one dwelling unit to another can be exceedingly annoying and detrimental to quality of life. With increasing use of high-density multi-family complexes, noise control in the building plan approval stage is of paramount importance.

The State has adopted minimum standards for noise insulation requirements for multi-family dwellings, which address the problem of noise transmission from one dwelling unit to another, and also noise transmission from exterior to interior. The standards are intended for inclusion in local building codes and their application will improve the quality of life in multi-family dwellings.

G. INDUSTRIAL NOISE SOURCES

Although land use incompatibilities between industrial uses and sensitive receptors may exist, whenever development of sensitive land use occurs adjacent to industrial facilities, planning processes are utilized to ensure proper land use compatibility with noise.

The City has planned for dispersed industrial zones within the City, some bordering residential zones. The present Planning and Zoning Regulations address the noise interface problem in qualitative terms. The regulations need to be quantified with respect to allowable interface noise, and to be simplified for ease of application, understanding and enforcement. Problems will become more acute and widespread unless controlled by regulation and ameliorating measures.

H. ARTERIAL TRAFFIC

Roadways have a tendency to attract traffic until they reach their capacity, then drivers divert to other less congested routes. In view of this phenomenon, it is important to consider the noise impact zone adjacent to each master planned highway when traffic volumes reach capacity. This approach provides a "worst case" perspective on adjacent noise exposure.

The current noise levels adjacent to each of the master planned roadway links have been analyzed to determine the location and extent of current noise problems. Table 4 provides the current noise levels based upon current traffic volumes, lane geometrics, and posted speed limits. A 4.0 percent truck mix was assumed for all other roadways.

Future traffic volumes for the master planned roadway links are provided in the General Plan Update Circulation Element. Based upon the roadway classifications, vehicular speeds and ultimate volumes, the future noise levels adjacent to roadway links within the City of Tehachapi were determined. Vehicular speeds for the links analyzed were based upon the current posted speed limits. Table S shows the master planned future noise levels associated with motor vehicle sources. It can be seen that the largest traffic volumes at the highest speeds result in the noisiest roadways.

A growing economy will result in an increase in truck traffic within the City. To preserve tranquility and quality of life in residential areas, there is a need for circulation plans that divert truck and through traffic from residential streets.

Although the State has preempted the City in establishing motor vehicle noise standards, it is the prerogative and obligation of the City to make use of these standards and supporting regulations to improve the environmental climate for health and quality of life. Forthcoming State regulations establish standards for certification of exhaust systems and provide simple roadside enforcement procedures available for use by the local enforcement agency.

The future noise environment of the City has been forecast based on computation of noise levels attributable to traffic increases resulting from new land use development accommodated by the plan's land use policy. Figure 9 depicts these levels of noise. These contours do not account for the baffling and muting effects of building masses and height along the street frontages.

Growth in and near the City of Tehachapi will generate increased traffic volumes. As traffic levels rise, existing residences will be exposed to significantly higher noise levels. A 26 percent increase in daily traffic will generate a 1.0 dBA noise increase. Doubling the traffic volume that will increase adjacent noise levels by 3.0 dBA. Additionally, new circulation links will be constructed that will serve the anticipated growth. These links will, in some cases, reduce the traffic volumes on other overcrowded roadways. However, in other cases, expanded roadway segments will provide capacity needed by future development and, in so doing, will become new sources of environmental noise.

IV. STATEMENT OF GOALS, OBJECTIVES AND POLICIES

The following section presents the goals, objectives, and policies for the Noise Element of the City of Tehachapi. Implementing programs for this Element are contained in Section 5.0 which follows.

Goal 1: Reduction of environmental noise levels consistent with criteria for health and quality of life.

Objective: Pursue a vigorous enforcement policy for existing laws relative to noise and establish more quantitative laws that will be clearly understood and enforceable.

Policies

- a. Develop strategies for the orderly implementation of mitigation measures for present noise impacted areas, such as that bordering State Route 58, the railway, and the industrial uses adjacent to residential uses.
- b. Identify the sensitivity of the various land uses to noise, and establish acceptable noise standards and criteria consistent with health and quality of life goals.
- c. Promote increased public awareness concerning the effects of noise.

Objective: Minimize the noise impacts associated with the development of residential units above ground floor commercial uses in designated "Planned Use" areas.

Policies

- a. Design planned-use structures to prevent transfer of noise from the commercial to the residential use provide for an appropriate land use interface between commercial and residential development by.
- b. Requires common walls and floors between commercial and residential uses be constructed to minimize the transmission of noise and vibration.

Objective: Minimize the noise impacts of helicopter overflights on residents of the City of Tehachapi.

Policies

- a. Discourage the overflight of police and emergency helicopters in residential areas of the City.

- b. Allow the development of heliports or helipads only when it can be demonstrated that noise impacts on adjacent residential uses can be adequately mitigated.
- c. Require that helicopters which utilize City of Tehachapi air space fly in compliance with Federal Air Regulations (FAR) Part 91 rules, maintain noise alleviating altitudes until landing, and utilize noise abatement procedures, except when these rules must be disregarded for safety and emergency reasons.
- d. Establish the City's commercial streets as the principal helicopter flight corridors and require use of these, except as may be required for safety and emergency reasons.
- e. Require that helicopter take-off and landing patterns be limited to commercial areas with the potential exception of the Tehachapi Hospital which might need to incorporate an emergency heli pad area.
- f. Discourage helicopter-training flights over the City between 11:00 p.m. and 7:00 a.m.

Goal 2: Planned compatibility of transportation, commercial and industrial noise sources with present and future noise-sensitive land uses.

Objective: Minimize noise spillover of transit and other uses on public properties into adjacent residential neighborhoods.

Policies

- a. Encourage the State Department of Transportation to conduct an active highway noise abatement program with scenic/aesthetic considerations.

Objective: Minimize the noise impacts of commercial-related parking overflow in residential areas.

Policies

- a. Evaluate new commercial developments against the City of Tehachapi parking standards to ensure that adequate off-street parking is being provided.
- b. Require businesses that generate substantial parking overflow into residential areas to participate in the development of municipal parking structures or municipal parking lots.

- c. Maintain updated determinations and evaluations of the present and future noise levels associated with all significant transportation and parking facilities in the City.

Objective: Minimize the impact of traffic-generated noise on residential and other noise sensitive land uses.

Policies

- a. Require development in areas where the ambient noise level exceeds 65 dBA to incorporate special treatment measures into project design to reduce interior noise levels. In addition to measures called out in the Uniform Building Code and State Noise Insulation Standards (California Administrative Code, Title 24), the following standards should be required of new development in these areas:
1. Use sufficient glazing for all sliding glass doors and all windows;
 2. Use insulation between walls and other appropriate measures to adequately reduce noise to acceptable levels such as ventilation techniques.
- b. Encourage noise sensitive uses, including schools, libraries, hospitals, religious facilities and residential uses, to incorporate walls and other sound barriers where feasible to do so.
- c. Discourage through traffic in residential neighborhoods by the use of cul-de-sacs.
- d. Require that new development minimize the noise impacts of trips it generates on residential neighborhoods by controlling the location of driveways and parking.
- e. Actively enforce existing sections of the California Vehicle Code related to mufflers and modified exhaust systems.
- f. Require new equipment and vehicles purchased by the City of Tehachapi to comply with noise performance standards consistent with the best available noise reduction technology.
- g. Work with local agencies to provide public transit services that reduce traffic and noise.

Goal 3: Allocation of noise impact mitigation costs to the agency or party responsible for the noise incompatibility.

Objective: Ensure that base line information regarding the noise environment of the City of Tehachapi is maintained.

Policies

- a. Monitor and update data regarding the City's current and projected noise levels.
- b. Employ state-of-the-art advances in noise impact mitigation, as they become available.
- c. Develop land use compatibility criteria directed at preventing encroachment of new noise sources on existing land uses.

Objective: Employ effective techniques of noise mitigation, based on quantified noise standards, through appropriate provisions in the Building Code, in the Subdivision Procedures, and in the Zoning and Noise Ordinances.

Policies

- a. Analyze the economic impact of noise resulting from any proposed development project, and develop justification and plans for equitable resolution.
- b. Make use of adopted Federal and State noise standards regulating allowable noise emission from motor vehicles.
- c. Make use of adopted State regulations on noise insulation requirements for dwellings.
- d. Make use of EPA regulations requiring the identification of noise characteristics of construction equipment, and other products distributed in commerce.
- e. Encourage public agencies and institutions located in the City to incorporate appropriate measures to contain noise generated by their activity onsite.

Goal 4: Protections of areas that are presently quiet from future noise impact.

Objective: Ensure that buildings are constructed soundly to prevent adverse noise transmission between differing uses located in the same structure and individual residences in multi-family buildings.

Policies

- a. Establish design criteria for commercial buildings, which prevents transmission of significant and unacceptable noise between individual tenants and businesses.
- b. Establish design criteria for multi-family buildings, which prevents transmission of significant and unacceptable noise between individual residential units.

Objective: Minimize the impacts of construction noise on adjacent uses.

Policies

- a. Require that construction activities which may impact adjacent residential units be limited to 8 a.m. to 7 p.m. during weekdays, except under special circumstances approved by the City; limited to interior construction between 8 a.m. and 7 p.m. on Saturdays; and prohibited on Sundays.
- b. Require that construction activities incorporate feasible and practical techniques, which minimize the noise impacts on adjacent uses.
- c. Urge continued Federal and State research into noise problems and recommend additional research programs as problems are identified.

Objective: Minimize noise spillover from commercial uses into adjacent residential neighborhoods.

Policies

- a. Adopt and enforce a standard for exterior noise levels for all commercial uses, which prevents adverse levels of discernible noise on adjacent residential properties.
- b. Require a minimum of fifteen (15) feet be landscaped or noise attenuation wall as a buffer between a commercial or mixed use structure and the adjoining residential parcel and in accordance with the requirements of the Land Use and Open Space Elements.
- c. Require that automobile and truck access to commercial properties located adjacent to residential parcels be located at the maximum practical distance from the residential parcel.

mitigate sound transmission and configuration of interior spaces to minimize sound amplification and transmission.

- e. Require that noise from entertainment uses not be discernible from ambient noise at a distance of fifty (50) feet from the establishment in which it is being conducted or within ten (10) feet of a residence, whichever is more restrictive.
- f. Provide for increased enforcement to minimize noise-related disturbances in residential neighborhoods adjacent to concentrations of entertainment uses and require that such uses monitor the activities of patrons who are waiting in line or loitering outside the establishment.
- g. Require that entertainment use, restaurants and bars control the activities of their patrons onsite and within reasonable and legally justifiable proximity to minimize noise impacts on adjacent residences.
- h. Discourage the development of new nightclubs, discotheques, and other high noise-generating uses adjacent to residential areas, unless it can be demonstrated that adequate measures can be employed to mitigate impacts of onsite operations and offsite customer access.
- i. Prohibit the development of new nightclubs, discotheques, and other high noise-generating uses adjacent to senior citizen housing, schools, health care facilities, and other noise-sensitive uses.
- j. Prohibit the use of the leaf-blowers, motorized lawn mowers, parking lot sweepers, or other high-noise equipment on commercial properties between 8 p.m. and 8 a.m. if their activity will result in noise which adversely affects adjacent residential parcels.
- k. Require that truck deliveries to commercial properties abutting residential uses be limited to 8 a.m. to 8 p.m. unless there is no feasible alternative or there are overriding transportation benefits by scheduling deliveries at another hour.
- l. Encourage commercial uses, which abut residential properties to employ techniques to mitigate noise impacts from truck deliveries, such as the use of a sound wall or enclosure of delivery area.
- m. Require the posting of signs in all commercial uses which request that all employees and customers minimize the noise they generate on their departure between 8 p.m. and 7 a.m.

V. NOISE ATTENUATION PRINCIPLES

A. NOISE ATTENUATION WITH DISTANCE

In its "Noise Assessment Guidelines", the U.S. Department of Housing and Urban Development uses a 4.5 decibel drop for each doubling of distance in assessing roadway noise. Thus, a noise level of 74.5 decibels at 50 feet from the highway centerline would be attenuated naturally to 70.0 decibels at 100 feet, 65.5 decibels at 200 feet, 61.0 decibels at 400 feet and so forth. This 4.5 decibel reduction with doubling of distance was applied throughout the analyses in this report.

B. GENERAL METHODS TO REDUCE NOISE IMPACTS

There are several basic techniques available to minimize the adverse effects of noise on sensitive noise receivers. Classical engineering principles suggest controlling the noise source wherever feasible and protecting the noise receptors when noise source control mechanisms have been preempted by State and Federal governments.

Those noise producers within local jurisdiction include: industrial processes, electrical substations, wastewater treatment facilities, transportation system locations, swimming pool/spa pump motors, air conditioning units, drive-through speakers, siren usage and local government controlled or sanctioned activities (City vehicles, public works projects, etc.). Regulatory mechanisms available to control these noise sources include: (1) the City Noise Ordinance, (2) the application of "conditions of approval" on new developments, (3) land use policy and approval practices as outlined in this General Plan, and (4) the provision of noise information in permit applications for swimming pools, spas, and air conditioning systems.

In the event that source control mechanisms have been employed and yet noise impacts persist or are projected to occur, additional techniques should be considered. Acoustic site planning, architectural design, acoustic construction techniques and the construction of noise barriers are all effective methods for reducing noise impacts.

Acoustic site planning involves the careful arrangement of land uses, lots and buildings to minimize intrusive noise levels. The placement of noise compatible land uses between the roadway and more sensitive uses is an effective planning technique. The use of buildings as noise barriers, and their orientation away from the source of noise, can shield sensitive activities, entrances and common open space areas. Clustered and planned unit developments can maximize the amount of open space available for landscaped buffers next to heavily traveled roadways and thereby allow aesthetic residential lot setbacks in place of continuous noise barriers.

Acoustic architectural design involves the incorporation of noise reduction strategies in the design and layout of individual structures. Building heights, room arrangements, window size and placement, balcony and courtyard design, and the provision of air

conditioning all play an important role in shielding noise sensitive activities from intrusive sound levels.

Acoustic construction is the treatment of various parts of a building to reduce interior noise levels. Acoustic wall design, doors, ceilings and floors, as well as dense building materials, the use of acoustic windows (double glazed, double paned, thick, non-opening, or small with air-tight seals), venting techniques and the inclusion of maximum air spaces in attics and walls are all available options.

Noise barriers are relatively easy to design and inexpensive. Consequently, they are often used in place of the techniques previously discussed. Ideally, noise barriers incorporate the placement of berms, walls or a combination of the two in conjunction with appropriate landscaping to effect an aesthetically pleasing environment. Where space is available (clustered developments) a meandering earth berm is both effective and pleasing. Where space is restricted, a wall is effective. In either case, however, thick landscaping (without deciduous plants) should be specified to reduce the visual impact of the barrier and retain an attractive ambiance.

VI. IMPLEMENTATION PROGRAMS

The City of Tehachapi currently has a unique opportunity to understand the ramifications of future planning decisions in terms of their effects on ambient noise levels. This understanding can allow appropriate environmental standards to be established which will protect current and future citizens from excessive noise levels that interfere with their daily routines and sense of well being.

As a prerequisite to an effective noise control program, a community must be cognizant of the location and extent of local noise problems; namely, major noise source locations, the number of sensitive receptors exposed, and what levels of exposure exist. This data can be utilized to focus noise control and abatement efforts. In some cases, the control of offending noise sources will be beyond the City's jurisdiction; however, by recognizing these limitations more effective land use strategies can be developed.

The major thrust of this Noise Element Section is to establish implementation measures which will result in compatible land use planning. To accomplish this, decision-makers must consider the State guidelines as well as policy coordination with other jurisdictional agencies, which can be applied to reflect local needs and objectives. Table 6 is a land use compatibility chart derived from policies and objectives identified in the Noise Element. Upon adoption of the General Plan Update, land use planning issues will need to address the standards contained within Table 6 and the implementation programs of this Element.

A. LAND USE POLICIES AND RECOMMENDATIONS

This General Plan Element can be used as a mechanism to specify land use requirements, which reflect noise compatibility and restrict less compatible uses. The measures

discussed below are designed to mitigate potential existing and future noise problems within the City of Tehachapi.

1. Designate Sensitive Land Uses

Consider the following use noise sensitive and discourage/prohibit them in areas where exterior noise levels exceed 65 CNEL (community noise equivalent level) unless measures are implemented which reduce the noise exposure below this level:

- ❖ Single and multiple family residential uses,
- ❖ Group homes, hospitals, schools and other learning institutions,
- ❖ Parks and open space areas where quiet is a basis for use.
- ❖ Noise sensitive land uses shall not be allowed near major stationary noise sources.

- ❖ Ensure through the design review process that exterior noise levels at commercial and industrial areas do not exceed 75 dBA.
- ❖ Ensure through the design review process that noise tolerant land uses are located in areas irrevocably committed to noise producing land uses, such as transportation corridors or railroads.
- ❖ Future projects approved within the City shall reflect adopted policies regarding the reduction of unnecessary noise near sensitive receptors such as parks, hospitals, libraries, schools and convalescent homes.

B. NOISE ORDINANCE

- ❖ Minimize noise emissions from all local government controlled or sanctioned activities via the creation and adoption of a section for the Noise Ordinance which:
- ❖ Sets maximum allowable noise specifications for new City owned or operated vehicles;
- ❖ Provides noise reduction retrofit equipment where effective and economically feasible; and
- ❖ Sets noise emission and construction time limits on public work projects.
- ❖ Enforce State vehicle noise regulations (Section 23130, 23130.5, 27150, 27151 and 38275 of the California Vehicle Code) to curtail the use of vehicles equipped with illegal or faulty exhaust systems and "hot rods" exhibiting tire squeal or excessive exhaust noise.
- ❖ Limit siren usage within populated areas by police, fire and ambulance vehicles.

C. FUNDING

- ❖ Assist in the formation of special assessment districts or other funding opportunities to install noise barriers or berm and barrier combinations in areas where existing residences back up to major thoroughfares.

D. REGIONAL COOPERATION

- ❖ The City shall periodically review County and regional plans for land use, transportation, airport operation, etc., to identify any potential noise impacts and develop strategies for the control of major noise sources on a County-wide and regional basis.

E. INSULATION REQUIREMENTS

- ❖ Insure that public buildings (schools, libraries, etc.) are sufficiently noise insulated to permit their intended function to be uninterrupted by exterior noise events.
- ❖ Enforce the California Noise Insulation Standards (Title 25 California Administrative Code) for multi-family dwellings to ensure an acceptable maximum interior noise level of 45 CNEL in habitable rooms and maintain adequate noise insulation.
- ❖ Acoustical privacy, consistent with the Noise Insulation Standards (California Administrative Code, Title 25, Chapter 1, Subchapter 1, Article 4) and all existing and future requirements outlined in the State Housing Code, shall be strictly enforced for both single and multiple family residential construction.
- ❖ The application of noise insulation and other noise control techniques in new schools, hospitals, and convalescent homes shall be consistent with State and Federal regulations.

OPEN SPACE/RECREATION ELEMENT

Adopted on October 18, 1999

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I. INTRODUCTION

The Open Space/Recreation Element addresses issues involving a number of environmental concerns within the planning area. These concerns include the management of natural resources, discussed in the Conservation Element, and the preservation and enhancement of scenic and recreation opportunities. This element combines the state-mandated Open Space Element and an optional Recreation Element.

A Parks and Recreation Element is often prepared by cities and counties due to:

- a. the concern of providing sufficient parkland for residents,
- b. the relationship of park space to a City's entire open space resource, and
- c. the requirement for preparation of a planned element as a condition of use of the Quimby Ordinance.

Open space issues and recreation concerns are often closely related; therefore, it makes sense to address these issues in a comprehensive manner. This process should begin with a definition of what open space consists of as pertaining to Tehachapi. In addition to the statutory definition stated below, open space shall be defined as space which is not used for buildings or structures, except for man-made facilities related to open-space uses. It may be air, land or water located within the City. It may be a park, a golf course, a creek bed, a courtyard or an apartment balcony. It may be publicly or privately owned. It may be owned in full or it may be only an easement.

California Government Code Section 65560 (b) states that *"Open Space Land" is any parcel or area of land or water which is essentially unimproved and devoted to an open space as defined in this section, and which is designated on a local, regional or state open space plan as any of the following:*

- a. *Open space for the preservation of natural resources including, but not limited to, areas required for the preservation of plant and animal life, including habitat for fish and wildlife species; areas required for ecological and other scientific study purposes; streams, ...lakeshores, banks of streams, and watershed lands.*
- b. *Open space used for the managed production of resources, including but not limited to, forest lands, rangeland, agricultural lands and areas of economic importance for the production of food or fiber; areas required for recharge of ground water basins; ...and areas containing major mineral deposits, including those in short supply.*
- c. *Open space for outdoor recreation, including but not limited to, areas of outstanding scenic, historic and cultural value; areas particularly suited for park and recreation purposes, including access to lakeshores, ...and streams; and areas which serve as links between major recreation and open space reservations, including utility easements, banks of streams, trails, and scenic highway corridors.*

- d. *Open space for public health and safety, including, but not limited to, areas which require special management or regulation because of hazardous or special conditions such as earthquake fault zones, unstable soil areas, floodplains, watersheds, areas presenting high fire risks, areas required for the protection of water quality and water reservoirs and areas required for the protection and enhancement of air quality.*

A. PURPOSE OF THE ELEMENT

Recreation and the availability of open space is an important facet of everyday life. Never before has public awareness regarding physical fitness and exercise been as great as it is at the present time. Similarly, the value of open space to provide visual relief from urban congestion, relief from the monotony of man-made structures, a more enjoyable community environment, and a heightened sense of community identity, has become necessary. The utilization of open space to make positive contributions to the inhabitants of Tehachapi by achieving multiple uses of land, preserving the natural environment, shaping urban development and preserving land values is becoming an increasingly important issue.

Organized and informal sports activities promote good health and cooperation among young people. Recreation pursuits are equally important for adults as a means to reduce stress associated with urban living. Parks sometimes provide the only open space for active recreation available to children and adults since urbanized yard areas are often too small for play and other recreational activities.

A number of key issues will continue to have an impact on the communities ability to maintain and expand recreation facilities and services in the coming years. Infill development in the City's core and in county areas is expected to continue, and the increased population will require a full range of services, including those related to parks and recreation.

A number of easements, including those for flood control, rail lines, and utilities, are located in Tehachapi and present the City with a unique opportunity to establish an integrated system of multiple use trails and bikeways.

The Open Space/Recreation Element for the City of Tehachapi is specifically concerned with enhancing and expanding the communities recreational needs and providing open space.

B. RELATION OF ELEMENT TO LAND USE

The Open Space/Recreation Element reflects existing land use patterns and attempts to delineate those areas within the City where additional pressure and demands will be placed on existing facilities. It is anticipated that as certain areas of the City continue with additional residential development, existing facilities will be more intensively utilized and additional facilities will be needed in certain communities. A careful watch needs to be taken to monitor where additional residential development

is occurring within the City to determine if additional recreation facilities will be needed to satisfy the needs and desires of the residents of a particular area.

Opportunities should be taken whenever possible to provide plazas, tot lots, mini parks and other open space within the commercial centers of town to serve those people who utilize the City's shopping areas. Particular attention should be given to meeting the needs of mothers with young children, the elderly and the handicapped. Facilities should be designed primarily to provide relief from the commercial environment and to encourage passive rest areas.

The City is also dependent upon regional facilities for meeting many of the needs of residents that cannot be met within Tehachapi. In a region where people are as mobile as in Southern California, it is important to look at total regional facilities, in addition to a city review since there is a high rate of inter-community travel and the majority of Tehachapi residents live in one of many unincorporated community such as Stallion Springs, Bear Valley Springs, Golden Hills, etc.

Due to the intensity of development existing and proposed for the next few years in Tehachapi, it would be impossible to provide regional recreational facilities within the core of the incorporate boundaries without displacing a substantial number of residents. Area is still available at the northeast end of the City. In addition to the existing community parks and golf courses in the regional surrounding areas, approximately 1580 acres of regional parks, recreational areas, and open space have been developed within the Greater Tehachapi Region. This figure does not include development of the Pacific Crest Hiking Trail, which traverses the ridgeline south and east of the City.

C. STATUTORY REQUIREMENTS

The issues, which are required to be addressed by an open space element, are listed in subdivisions of Government Code Section 65560 and Public Resources Code Section 5076. Portions of these Codes, which are relevant to the City of Tehachapi, have been restated below:

California Government Code Section 65560(a) states that a *Local open space plan is the open space element of a county or city general plan adopted by the board or council, either as the local open space plan or as the interim local open space plan adopted pursuant to Section 65563.*

California Government Code Section 65561 states:

1. *That the preservation of open space land, as defined in this article, is necessary not only for the maintenance of the economy of the state, but also for the assurance of the continued availability of land for the production of food and fiber, for the enjoyment of scenic beauty, for recreation and for the use of natural resources.*

2. *That discouraging premature and unnecessary conversion of open space land to urban uses is a matter of public interest and will be of benefit to urban dwellers because it will discourage noncontiguous development patterns which unnecessarily increase the costs of community services to community residents.*
3. *That the anticipated increase in the population of the state demands that cities, counties and the state at the earliest possible date make definite plans for the preservation of valuable open space land and take positive action to carry out such plans by the adoption and strict administration of laws, ordinances, rules and regulations as authorized by this chapter or by other appropriate methods.*
4. *That in order to assure that the interest of all its people are met in the orderly growth and development of the state and the preservation and conservation of its resources, it is necessary to provide for the development by the state, regional agencies, counties and cities, including charter cities, of statewide coordinated plans for the conservation and preservation of open space lands.*
5. *That for these reasons this article is necessary for the promotion of the general welfare and for the protection of the public interest in open space land.*

California Public Resources Code Section 5076 states that *every city and county shall consider demands for trail-oriented recreational use and shall consider such demands in developing specific open space programs. Further, every city, county, and district shall consider the feasibility of integrating its trail routes with appropriate segments of the state system.*

II. COMPONENT OVERVIEW

It is the intent of the Open Space/Recreation Element that open spaces of the City be improved to establish a high quality environment for their use by residents, businesspersons, and visitors. Basic principles include the maintenance and expansion of the City's open space parks, nodes and linkages, the installation of trees along all street frontages in the City, the managed production of resources, the preservation of plant and animal life habitat, and areas of outstanding scenic, historic and cultural value.

The Open Space/Recreation Element is comprised of three general use categories. These are: 1) Mixed Use Open Space - areas serving a primary function other than recreation, but having the possibility to provide a wide range of recreational and open space opportunities; 2) Active Open Space - intended primarily for recreational usage, such as a park, and 3) Natural Open Space - areas serving a primary non-recreational function which is intended for habitat protection with only passive recreational uses, if any.

A. MIXED USE OPEN SPACE

These areas include both a range of primary land uses and a variety of recreational opportunities. Land-use designations include the Public Open Space and the Semi-public Open Space categories. The Public category includes land uses such as public facilities, institutions, and flood control channels. Semi-public designations include land uses such as power, water, and gas transmission facilities, utility and railroad rights-of-way, and stream or creek beds through private property. Both of these categories have non-recreational primary uses, which include open space characteristics. Some of the uses allow for a variety of recreational opportunities within that open space. These opportunities include equestrian and bicycle paths, landscape buffers, and parks and playing fields. Because of the corridor nature of many of these land uses, they provide an opportunity for pedestrian linkages throughout Tehachapi.

The recreational/open space opportunities that can be applied to utility corridors have already been demonstrated in many cities. Utility corridor specific plans allow for playing fields, parks, trails, and natural habitat to be incorporated into Southern California Edison and quasi-public easements. This General Plan encourages the continued development of easements for alternative open space and recreational uses. The Open Space Plan Map identifies easements, which have the potential to be developed for a variety of recreational uses.

The Circulation Element includes provisions for the establishment of bicycle facilities such as routes and storage sites. These routes, however, often follow established roadways. Use of open space easements allows for bike routes as well as hiking and equestrian trails to be separated from traffic. Standards for various trail possibilities are shown in Figure 1. In general, trail standards should conform to these configurations. In certain areas, trail standards may need to be adjusted in response to access or right-of-way constraints. Standards and use of the illustrated trail types are generally described as follows:

1. **Equestrian/Hiking Trail.** This category of trail is to be used for horseback riding, hiking and jogging. No facilities are provided and trail will be an unimproved dirt path. This use is best for the stream and creek bed setbacks throughout the private properties within the Tehachapi-South Community.
2. **Hiking/Bike Trail.** This category of trail is used jointly by bicyclists and hikers. The bikeway consists of an asphalt or concrete path. The hiking/jogging trail is located adjacent to the bikeway and is unimproved. Small rest stops may be located at strategic intervals along the trail.
3. **Joint-Use Trail.** Equestrians, bicyclists, and hikers may use this trail. The bikeway is fully improved with concrete or asphalt. The hiking and equestrian trails are dirt paths. The equestrian trail is separated from the

hiking trail and bikeway.

Landscaping along trails should be limited to those areas where landscaping would otherwise be provided. These landscaped areas include designated parks, landscaped shoulders along roadways, greenbelts, landscaped open space, and golf courses. Permitting native vegetation to thrive along other trail links will provide habitat for native species.

The Open Space/Recreation Plan focuses on identifying utility corridors and other easements that provide multi-use recreational potential. These areas can provide, where feasible, linkages to existing bicycle routes, equestrian trails, and regional trails. Completion of a comprehensive trail system will expand recreation opportunities in the City and reduce dependence on the automobile.

B. ACTIVE USE AREAS

This component is comprised of land uses and land use designations which are specifically recreational. Land-use designations included are Recreation and, in some cases, Schools and Public Facilities. The Recreation category includes parks used primarily for recreation and open space and school playgrounds, which serve the school district and the general public in a joint use capacity. Auditoriums at schools and certain public facilities provide additional recreation opportunities. This component of the Open Space/Recreation Plan focuses on planned recreation opportunities for Tehachapi's residents.

A well-planned and coordinated public park system provides residents with opportunities for both active and passive recreation. The benefits of recreation on physical and mental health are well known, and it is the intent of the City to offer community residents every opportunity to achieve physical and mental health goals through recreation.

1. Park Standards

The National Recreation and Parks Association (NRPA) publishes standards for parks and specialized facilities such as game courts, athletic fields, and the like. Standards for parks are commonly expressed in a ratio of the number of acres of parkland per 1,000 population. The nature of the ratio allows sensitivity to population densities.

A commonly accepted minimum standard is three acres per one thousand people. In order to ensure City residents, now and in the future, are provided with sufficient parkland to meet recreation needs, this figure should be utilized to determine priority areas within Tehachapi and areas, which the City is attempting to accommodate in the future. Using these figures, high priority open space acreage to serve the current 1999 population of approximately 6,582 should be 20 acres. While, the population projections of 12,384 by the year 2010, sets the goal for future open space provisions within

the City of Tehachapi at 37 acres.

Existing open space within Tehachapi incorporates both public and private school lots, and public and Semi-public Park and open land area. The total acreage of public parkland within Tehachapi is 14 acres. Semi-public open land within the flood control and utility rights-of-way total approximately 250 acres. School system properties make up a portion of the open space within Tehachapi, totalling about 85 acres. The airports total an additional 290 acres of what can be considered open space. In addition, the 41 acre Benz-Visco Tehachapi Youth Sports and Cultural Park is currently under development. It is currently not planned to incorporate the Benz-Visco Tehachapi Youth Sports Park into the Tehachapi Valley Recreation and Park District. Alternately the complex will be developed and managed in what can best be characterized as a public/private partnership.

Other factors besides acreage requirements also need to be considered in planning for future parks. Climate, age make-up of the population, availability of regional recreation facilities, all affect when, by whom, and how frequently parks will be utilized.

2. Park Types

Location, spatial requirements, and facilities can categorize parks. Parks proposed within the City of Tehachapi have been placed in one of three general categories: community parks, neighborhood parks, and sub-neighborhood parks. The schematic diagram in Figure 2 summarizes standards and facilities within these community, neighborhood, and sub-neighborhood categories.

a. Community Parks

A community park is a walk-in, drive-to park. It serves several neighborhoods. A typical community park may include some or all of the following:

- ❖ Swimming pool
- ❖ Play apparatus areas
- ❖ Sports fields - lighted
- ❖ Restrooms
- ❖ Recreation/activity building
- ❖ Off-street parking
- ❖ Tennis courts
- ❖ Service yard
- ❖ Picnic areas

b. Neighborhood Parks

A neighborhood park is primarily a walk-to park, intended to provide near-at-hand recreational facilities and to serve as a neighborhood focal point. In general, a neighborhood is an area served by one elementary school. It has a service radius of approximately 1/2-mile. A neighborhood recreation center may be a combination school and recreation park that provides space for outdoor and indoor recreation activities under supervision. Some neighborhood recreation centers, however, may be on sites that are not contiguous with schools.

The site should be within walking distance of the homes within the neighborhood. A few neighborhood parks or park playgrounds should serve each community. The amenities of each neighborhood park should be determined by the particular needs of the individual community.

A neighborhood park should be designed to provide the basic walk-to-recreational type facility and open space to serve the day-to-day needs of the specific area. A typical neighborhood park may include some or all of the following:

- ❖ Play tot lot
- ❖ Paved area for court games
- ❖ Field for sports (possibly in conjunction with school playgrounds, provided sites are contiguous)
- ❖ Family picnic and barbecue area
- ❖ Open space for free play
- ❖ Neighborhood center facility
- ❖ Quiet area
- ❖ Off-street parking
- ❖ Landscaping (30% of site, plus transition area and perimeter buffer)

c. Sub-Neighborhood Parks

Because of the difficulty of providing full-sized neighborhood and community parks in built-out areas, it shall be the policy of the City to establish smaller recreational areas within the City's core. Such smaller areas may take the form of mini-parks, play lots, or tot lots as defined below:

1) Mini Park

Usually less than one acre in size, may be designed to serve children only, senior citizens only, or all age groups, depending on the needs of the area. The size and location is determined more by the availability of vacant land than any other factor.

2) Mini Play Lot

A small area intended for children up to six or seven years of age. It is essentially a substitute for the backyard and thus is usually provided in higher density areas. Play lots range in size from 2,500 square feet up to one acre and usually features play apparatus, a paved area for wheel toys, benches, sand areas, and landscaped treatment. Children should not be required to cross a major arterial street to reach a play lot.

3) Tot Lot

Play area for small children generally consists of a sand area, play equipment, and a shady sitting spot for mothers and/or fathers, usually located within a neighborhood or community park.

C. NATURAL OPEN SPACE

These areas coincide with the Natural Resource Areas as described in the Land Use Element. The intention of this category is to allow, for specific environmental reasons, certain areas to remain in a natural condition. Environmental constraints in these areas include steep topography, wildfire potential, a capacity for erosion and/or landslides, visual qualities, archaeological potential, and a range of wildlife habitat. These areas may include both private and public lands. Primary use of these areas is limited to residential at one unit per eighty acres.

In order to ensure the preservation of plant and wildlife resources, land must be protected from development to provide areas for native biota to thrive. Land uses policy calls for the preservation of wildlife habitat through the designation of the Natural Resource Area. Although the open space has not been set aside specifically to create and preserve habitat area, the areas will undoubtedly be used by wildlife for foraging and habitat. Hence, the one unit per eighty acre density. Further discussion of biotic resources is provided in the Conservation Element.

The Natural Resource Area designation provides other benefits beside protection of aesthetic and biotic resources. Development on steep hillsides can have adverse environmental consequences (e.g., increased hazard of landslides, erosion, and runoff) and can endanger persons living in homes built on rugged terrain. Wildfires in these areas also pose a significant threat. To reduce environmental and public safety risks associated with hillside development, land use policy shall call for grading limitations and the use of the Natural Resource Area designation in areas where slopes exceed 25 percent.

The Open Space/Recreation Plan, as an element of the General Plan for the City of

Tehachapi, has two fundamental characteristics, which are mandated by state law. First, it must be generalized, comprehensive, and long range. Second, it must be directed primarily toward the preservation and proper management of those open spaces now in existence.

III. OPEN SPACE/RECREATION PLAN

The Open Space/Recreation Plan for the City of Tehachapi as proposed herein consists of three distinct but intimately interrelated parts which correspond to the characteristics discussed above: 1) the existing open-space areas in Tehachapi; 2) the framework of future major open-space nodes and linkages; and 3) the preservation of the natural environment in which the City is situated.

The three components described above (Mixed-Use Open Space, Natural Open Space and Active Open Space) are combined within the Open Space/Recreation Plan. The Open Space/Recreation Plan Map illustrates the diversity of existing and potential open space and recreational opportunities that are available in Tehachapi. Indicated on the Plan Map are locations throughout the City that relate to the aforementioned components. These are described in the following subsections.

Future open space and recreation needs within the City will be determined by adopted park and site selection standards. Sites for larger community and neighborhood parks are air unlimited within Tehachapi. The location and size of these parks will require additional study into property acquisition issues. The need for these types of parks will be especially critical near school locations and around areas designated for multi-family types of housing.

The pattern of existing open spaces needs interpretation in order to derive a framework for future planning and actions. The illustrations of major open space nodes and linkages on the Open Space/Recreation Plan Map constitutes an interpretation which describes in generalized terms the recommended future program.

A. TEHACHAPI'S MIXED-USE OPEN SPACE

Utility/Underground Pipe Easement Corridors - may serve alternatively as hike/bike/equestrian trails, parks and playing fields, and visual relief from the surrounding urban environment.

Flood Control Basin - may serve alternatively as a community park.

Railroad Corridor - has the potential to serve as hike, equestrian, and bike linkages, if proper division and safety features are incorporated into the design.

B. TEHACHAPI'S ACTIVE USE AREAS

Existing and Proposed Parks - include existing parks within the City's park system, parks proposed for addition to the system and the open space and golf course amenities anticipated within the Loop Ranch and Capital Hills specific plans areas. Proposed parks and open space areas within adopted specific plans are indicated.

School Yards - may act alternatively to serve neighborhood recreational needs. Both public and private schools are listed. Existing and proposed schools within the school system are indicated.

Bicycle and Equestrian Trails - include existing trails and those proposed within adopted specific plans. Some trails indicated serve bicycling, hiking, and equestrian uses.

C. TEHACHAPI'S NATURAL OPEN SPACE

Streams, Creek Beds and Drainage Corridors - shall not be concrete or paved in any way, but retained in their natural state. Rip-rap and other similar materials are acceptable as methods as erosion control. They have the potential to alternatively serve as hiking and equestrian trails and additional visual relief from the urban environment.

Antelope Run, Tehachapi Creek area and the foothills to the north and south of the City.

The hills on the southern and northern borders of the City provide a significant visual backdrop to the urban environment. These areas, along with landscaped, agricultural or other open areas located throughout the City, provide visual relief from the expanses of roads, buildings and signs. It is the City's intent to preserve hillside open space wherever possible yet still allows for development. Hence, the one unit per twenty acre density for agricultural land and the one unit per eighty acre density for natural preserve land.

D. OPEN SPACE INVENTORY

The following paragraphs describe the various open space areas and the park and recreational facilities located in and around the Greater Tehachapi Area. Regional recreation facilities in the Greater Tehachapi Area include:

Golf courses are located to the west of the City at Stallion Springs and Bear Valley Springs. There is also a golf course located in the Golden Hills development that is defunct and gone to seed. The golf course has been closed for approximately five years. However, there has been some recent party interest in reestablishing a golf course. In addition, the conceptual Loop Ranch Specific Plan Land included a golf course;

The 490 acre Tehachapi Mountain County Park facility, located less than five

miles southwest of the City, includes campsites, mess hall and cabin buildings, barbecue pits, picnic tables, hiking/equestrian trails, and horse corrals;

The 1000-acre Indian Hill Ranch Campground, which provides RV, trailer, tent, and group camping, bandstand, dance floor, and horse facilities, in addition to hiking trails, fishing dock, shower houses, picnic tables, and barbecue pits; Indian Hill is located approximately ten miles from the City;

The 90 acre Brite Lake area, which has fishing, non-power boating and 90-space camping facilities, twelve of the campsites have electrical and water hookups; showers, playground and picnic pavilions are also available . Brite Lake is managed and operated by Tehachapi Valley Recreation and Park District. Brite Lake is located approximately four miles southwest of the City; and the Fantasy Haven Glider Port facility, which provides visitor sailplane rides, an RV park and campsites, 27 with hookups, and other recreational activities; Fantasy Haven is located within Community 8, discussed below.

The Tehachapi Valley Recreation and Park District presently operates one community park (West Park) and two neighborhood parks (City Park and Railroad Park). The district operates one additional community park facilities, a baseball park and an indoor swimming pool. An additional 40 acre park site, east of the City limits is being developed by private interest.

The Tehachapi Valley Recreation and Park District has purchased an additional 20 acres for a new park site. It is anticipated that the new park will be located adjacent to the proposed high school which will facilitate a joint use concept.

School sites for the Greater Tehachapi Area shall accommodate a maximum enrollment of 600 for elementary and 1300 for junior high schools, with a minimum lot size of twelve acres per site. Although several schools in the Tehachapi community are either in the planning or development phases, the Tehachapi Unified School District and the City of Tehachapi have a joint agreement for use of existing playground and recreational facilities which increases the availability of open space and recreation facilities within the community.

The City has been divided into geographic subsets and identified as "community" for the purpose of this document. This approach will facilitate a more detailed analysis of each community's existing facilities and possible deficiencies for each area. It is evident that distribution of open space acreage throughout Tehachapi does not correspond to the population distribution. Numbers of the following communities refer to the corresponding areas as shown on the Open Space/Recreation Plan Map.

Community 1

This community, known as the Loop/Broome Ranch area, is mostly located north of State Highway 58 and west of the Voyager Drive and the northward extension of Challenger Drive. Presently, the community is unincorporated and undeveloped. However, the original specific plan concept includes active parks, an equestrian center with equestrian/hiking trails throughout the area and a school site. The northwest portion of the community is a resource reserve location for the protection of sensitive wildlife species, wildlife habitat and archaeological sites. The proposed community facilities will be adequate to serve the needs of the community. It should be noted that the Loop Ranch currently has no entitlements and will be required to go through the Specific Plan Approval Process. As such, open space/recreation amenities are only conceptual as of this writing.

Community 2

This community, known as the Capitol Hills and North Tehachapi area, is bounded by Voyager Drive and the northward extension of Challenger Drive on the west, the City Sphere-Of-Influence boundaries on the north and east, and State Highway 58 on the south. A portion of this community is currently being developed into Phase 1 of the Capitol Hills Specific Plan. Upon completion of the various phases the specific plan area will include a centrally located park facility which shall encompass and protect archaeological resources. The northeast portion of the community is a resource reserve location for the protection of sensitive wildlife species, wildlife habitat, viewshed area and possible archaeological sites.

Community 3

The West-Tehachapi community is bounded on the west by the City's Sphere-Of-Influence border, on the south by Highline Road, on the east by Curry Street and on the north by the railroad right-of-way, Tucker Road and the Conway Avenue/'C' Street extension. The Central Business District is discussed separately as Community 4. Golden Hills Elementary School is located approximately two miles to the west of the community border off of Valley Boulevard. The Antelope Run Linear Park Project will bisect the community and provide much needed park space. The southwest portion of this community is presently used for agricultural purposes and should remain as such to preserve the heritage of the region.

Community 4

This community encompasses the downtown area. It is bounded by the railroad right-of-way, Tucker Road, the Conway Avenue/'C' Street extension, and Mojave Street. The area includes both Wells Elementary School and Saint Malachy's School in addition to two neighborhood parks (Railroad, and

City) and one community park (West). The downtown community also includes community softball facilities, and the northern portion of the future Antelope Run Project. Railroad Park encompasses .5 acres and is basically a green belt park with benches, barbecue pits and picnic tables provided. City Park is a four (4) acre facility with playground equipment, picnic tables, benches, barbecue pits and a gazebo. West Park consists of 13 acres with benches, barbecue pits, picnic tables four (4) softball (2 – lighted adult and 2 youth fields) and a 10,000 square foot activity center, which includes a gym, meeting rooms, kitchen, restrooms and office space.

Community 5

The Tehachapi Airport area is bounded by State Highway 58, Dennison Road and the Southern Pacific Railway. The wastewater treatment plant provides open space, which is used by waterfowl and other migratory birds. Reclaimed water is used for irrigation of a large area of farmland north of the airport and could be used to irrigate park space throughout the City if the treatment plant were upgraded from an advanced secondary to a tertiary treatment facility.

Community 6

The mid-city community is bounded by the railroad right-of-way, Mojave and Curry Street to the old Pear Orchard, Highline Road, and Steuber Road. The majority of this community is used for agriculture, but development plans have been submitted to the City. Schools within this community include Tompkins Elementary, Jacobsen Junior High, and Tehachapi High. A school site has been chosen near the intersection of Cherry Lane and Hickory Avenue for future construction. The facilities in Community 6 consist of approximately 40 acres and include an indoor swimming pool, tennis court, football field and 440-yard track, gymnasium, and a general school recreation area. A 20 acre park site has been purchased by the Tehachapi Valley Recreation and Parks District to the new high school site on Dennison Road.

Community 7

The East-Tehachapi community is located east of Steuber Road and north of Highline Road. The north half, encompasses a mining resource area, is presently undeveloped and should be reserved for a possible regional open space/recreation facility. The central area is proposed for industrial uses. Aqueduct Elementary School, which is currently unused, is located just east of the City's Sphere-Of-Influence. A 40 acre park (Benz/Visco) is being developed by private interest.

Community 8

This community is located south of Highline Road. The eastern section

consists of undeveloped, natural habitat and should be preserved as a natural resource area. The central area has been developed for flood control. During the dry seasons this area can be used for recreational purposes. The central area also includes the Fantasy Haven facilities previously discussed. The development proposed for the western section should include plans to retain the existing drainage ways as open space enhancements by preserving their natural vegetative state and routing hiking/equestrian trails through the area.

E. OPEN SPACE OPPORTUNITIES

1. Open Space Nodes

The Open Space Plan designates major Open Space Nodes, all of which are presently in existence. New smaller open space nodes are proposed for the City. These have been pointed out in the Open Space Inventory and on the Open Space/Recreation Plan Map.

The Open Space Plan proposes to enhance these nodes by:

- a. Preserving these nodes in perpetuity for park, recreation and open space uses;
- b. Preventing the intrusion of any uses or activities, which are not clearly of a public nature and of benefit to the public at large;
- c. Controlling land uses around the nodes so that possible future effects which could lead to environmental, social or aesthetic degradation of the node or its usefulness to the people can be identified and prevented;
- d. Considering methods by which utilization and enjoyment of the area can be improved; and
- e. Maintaining the present foliage at a high level and improving the quality and quantity of vegetation where and when appropriate.

2. Major Linkages

The linkages designated on the Open Space/Recreation Plan Map consist of linear rights-of-way easements. These linkages are visualized as comprising bicycle paths, hiking paths, linear parks and/or natural open space. The development of this system throughout the City, where grade separations are not possible, poses difficult design and safety problems. Despite these difficulties, the City should apply methods by which the system can be completed.

The Open Space Plan proposes to preserve and improve these Linkages by:

- a. Working with appropriate agencies and individuals to acquire open space linkages and develop concepts mentioned;
- b. Developing methods for overcoming the design and safety problems;
- c. Establishing a desired path through the developed portions of the City; and
- d. Working with other agencies and individuals to bring the plan to fruition.

IV. GOALS AND POLICIES

Based on the definition and functions of open space as outlined in the previous sections, the following goals, objectives and policies for the Open Space/Recreation Element have been formulated. These statements are the basic criteria to be considered in effectively realizing the Open Space/Recreation Plan for the City of Tehachapi.

The policies and objectives of the Open Space/Recreation Element are predicated on the goals that are established. These goals form the core around which the entire program is formulated. The statements found in this section express the wishes and desires of the people for the long range, orderly development of the open spaces program.

ISSUE A - Supply of Parks, Recreation Facilities and Programs

ISSUE B - Financing

ISSUE C - Safety, Maintenance and Accessibility

ISSUE D - Public, Private and Regional Resource Coordination

GOAL A. Improve the process for updating open space plans and programs and strengthen participation by citizens, elected officials, and technicians.

Objective Ensure that cost of all parks, recreation facilities and programs are borne by those who benefit and contribute to additional demands.

Policies

1. Consider the sale of bonds as a means of generating funds for parks and recreation services.
2. Require that new residential development provide recreational or open space facilities on-site or contribute fees to the public development of additional facilities to offset additional demands generated by its resident population.

3. Allow for the development of a portion of the open space requirements of multi-family residential projects to be common recreational facilities.
4. Require that new commercial development provide open space facilities on-site for passive or active recreation or contribute fees for the development of such uses.
5. Prior to the recordation of the tentative map or parcel maps, developers shall contribute to the provision of parks and recreational facilities, as set forth in Chapter 17.42.010 of the Tehachapi Municipal Code to mitigate additional demands of these facilities created by the new development.
6. The standard park acreage for residential development is three acres per thousand population. This acreage may include property owned by third parties, including but not limited to the school district or the Tehachapi Valley Recreation and Parks District, or the City of Tehachapi, which is made available through cooperative agreements.

GOAL B. Provide for both public and private interests in the development of essential open space facilities, which have the greatest possible benefit for the largest number of citizens.

Objective Provide additional parkland and recreational facilities and programs which meet the need of the residents of the City of Tehachapi.

Policies

1. Ensure that sub-neighborhood parks be designed to meet the particular needs of the area they serve, i.e., seniors, families with children.
2. Conduct ongoing need assessment and evaluation of demands for recreational activities and public meeting facilities and modify programs where necessary to meet these demands, provided that adequate funding is available.
3. Incorporate "hard" recreational facilities (i.e., tennis and basketball courts) into new parking structures when developed on park sites.
4. Consider consolidating public meeting, indoor sports, aquatic sports, and public auditorium facilities through the use of multi-purpose structures.

5. Define additional cultural facilities (libraries, community center, theater or band shells, etc.) that will meet the needs of the community.
6. Adopt and implement an official park acquisition program to meet current and future needs; including direct input for capital budget purposes, scheduling of Quimby Act funds, and periodic reviews of changing growth rates and General Plan Update policies.
7. Establish a formal mechanism by which the City may accept gifts and dedications of parks and open space.
8. Consider the use of eminent domain to acquire additional parkland where the need for parks and recreation facilities is greatest, provided that the City's housing supply is not adversely affected.

Objective Recreational facilities shall be provided to meet the needs of all segments of the community for recreational activities, relaxation, and social interaction.

Policies

1. The City will require the development of open space and recreation areas within new residential developments.
2. A system of neighborhood parks within convenient walking distance of all urban areas shall be established.
3. Develop recreational facilities and programs to meet the needs of all population segments - the young, families, seniors, ethnic populations, and those with special needs.
4. Accommodate unique social, cultural, and ethnic needs in the design and programming of recreational spaces and facilities, considering especially the needs of children, elderly, disabled, and female-headed households.

GOAL C. Promote and insure that the development, maintenance of, and access to parks, natural open spaces and recreation resources in the planning area will continue to be emphasized to meet the needs and desires of all the people of the community.

Objective Ensure all open space and recreational resources within the Planning Area are landscaped and maintained to promote a high quality of recreational experience.

Policies

1. Encourage variety in the design of park facilities to enhance the lifestyle of residents to be served.
2. Monitor and review design, landscape development, and maintenance of parks. Ensure that quality standards are established which consider the intended function of recreation resources and their impacts on surrounding areas.
3. Develop master plans for each park to ensure that (a) new development of buildings, open facilities, and landscape is unified, functionally related to improve efficiency, and compatible with adjacent uses; and (b) landscape locations and species are coordinated with architectural and site design.
4. Install new and replace existing landscaping where it is severely deteriorated, inappropriately located for park activities, and incompatible with other landscape and adjacent uses.

GOAL D. The City shall preserve the integrity, function, productivity, and long term viability of environmentally sensitive habitats throughout the Planning Area.

Objective Measures to preserve and protect significant natural environments, particularly those in the rural/undeveloped areas of the City, and in the nearby hills and mountains, shall be implemented.

Policies

1. The City shall protect and preserve significant habitats and hilly areas with slopes greater than 25 percent within the City, hills and mountains.
2. Development activity shall not degrade the natural beauty of the area and reasonable steps shall be taken to mitigate adverse effects such as preserving existing trees, topography, landscape, and rock outcroppings.
3. Areas identified in the Conservation Element, as being of special wildlife or ecological nature shall receive attention for open space preservation.
4. Protect and manage natural resources such as wildlife, vegetation, soils, air, water and materials to retain their functional and ecological values.

5. Development projects shall not damage streams and gully areas.
6. Flood control modifications, which are required, shall use designs, which avoid alteration of natural creek patterns and adjacent environs.
7. Projects should preserve drainage areas and provide multiple use of these areas for such purposes as parks, open space, trails and flood easements.

Objective Conserve open space areas which will help perpetuate the unique natural and cultural setting of the region for the enrichment of its residents.

Policies

1. Preserve a desired livable environment in which the physical development, as well as, the enjoyment of the area is enhanced.
2. Protect areas of natural diversity and beauty such as hillsides, meadows and streams.
3. Accommodate unique social, cultural, and ethnic needs in the design and programming of recreational spaces and facilities, considering especially the needs of children, elderly, disabled, and female-headed households.
4. Preserve existing park space and recreational facilities, especially open turf areas and trees, while allowing for the redesign, reconfiguration and replacement of existing spaces and facilities to increase their recreational potential and usability.

GOAL E. Achieve balanced distribution of open space/recreation facilities throughout the City which meets the needs of the community for recreation, relief from urban development, a more enjoyable environment, and which will prevent some of the adverse effects of urban sprawl and other forms of inappropriate development.

Objective Provide a diversity of programs and facilities to meet the needs of all individuals and groups in Tehachapi, with special attention to the elderly, handicapped, and economically disadvantaged.

Policies

1. Encourage the notification of the City's residents of the types of recreational facilities and programs, which are available and encourage their participation.

2. Develop parks in conjunction with school facilities whenever possible to encourage joint use.
3. Ensure that sub-community parks be designed to meet the particular needs of the area they serve, i.e. seniors, families with children, etc.
4. Require that new residential development provide recreational or open space facilities on-site or contribute fees to the public development of additional facilities to offset additional demands generated by its resident population.
5. Allow for the development of a portion of the open space requirements of multi-family residential projects to be common recreational facilities.
6. Require that new commercial development provide open space facilities on-site for passive or active recreation or contribute fees for the development of such uses.

Objective The City will seek to establish a balance of natural open space and improved recreational open space.

Policies

1. Incorporate areas for both active and passive recreation into parks and facilities and ensure that these are accessible to all age groups, as practical.
2. Maintain an appropriate balance between physical development and the preservation of open space to meet the needs of the inhabitants for recreation and natural amenities.
3. The City shall provide for pedestrian, equestrian and bicycle trails as linkages between open space and recreational facilities within the Planning Area.
4. Establish a system of neighborhood parks within convenient walking distance of all urban areas, improving the standards of park space per resident through public and private acquisitions and improvements.
5. Incorporate "hard" recreational facilities (i.e., tennis and basketball courts) into new parking structures when developed on park sites.

Objective Ensure that parks and recreational resources are accessible and safe for their users and compatible with adjacent residential and commercial uses.

Policies

1. Ensure that all parks are adequately illuminated for safe use at night.
2. Provide for the supervision of park activities and promote enforcement of codes restricting illegal activity.
3. Continue coordination of park security between the Tehachapi Valley Recreation and Park District and the Sheriffs Department to insure that they are adequately patrolled.
4. Design parks and site their activities, buildings, outdoor facilities, people-gathering areas, lighting, parking areas, and other elements so that they do not adversely affect adjacent uses.
5. Restrict and control nighttime park use so that adjacent residences are not adversely affected.

GOAL F. Maintain sufficient resource areas for continued open space qualities, agricultural production and mineral extraction without detriment to existing or potential urbanization.

Objective To the extent feasible provide stable areas for long term agricultural and mineral extraction uses that will not be subject to premature urban development.

Policies

1. Establish prime agricultural land uses in order to prevent premature conversion of urban land to subdivisions.
2. Establish as a priority for public funding the acquisition and development of parks and recreational facilities in neighborhoods in which there is a shortage of parks.
3. Prevent adverse effects of urban sprawl and other forms of urban development.

GOAL G. Develop open space plans and programs in close cooperation with appropriate county, city and private agencies, to establish procedures to bring about more effective communication and cooperation.

1. Planning activities of the City and County should be coordinated for cooperative action that promotes sound and orderly growth of areas that affect the respective jurisdictions.
2. Regional programs to improve air quality shall be supported.

3. Encourage the development of recreation programs by non-City public and private education and sports organizations to involve more children and adults in outdoor recreation activity; using volunteers to operate and maintain programs whenever possible.
4. Development projects within the Kern County area that are within the City of Tehachapi's designated Sphere of Influence should be evaluated as to consistency with the City's General Plan Update.

Objective Increase existing conservation of, development of and access to local and regional open space resources by coordination with appropriate city, county and private agencies.

Policies

1. Encourage the Tehachapi Unified School District to continue to make the playgrounds, play fields, and auditoriums of Tehachapi schools available to local residents for recreational use after normal school hours and on weekends.
2. Participate in the upgrading of Tehachapi schools' open spaces for public recreational use, provided that such improvements do not impair the security of school facilities.
3. Designate creeks, channels, utility corridors, and transportation rights-of-way as major elements of the open space/recreation network, in conjunction with fee owners. This network shall provide a link with other open spaces and recreational areas within the City and with adjacent community and County recreation plans.
4. Development on hillsides shall be designed to minimize visual impacts, amount of grading and potential erosion hazards.

V. IMPLEMENTATION PROGRAM

A very important aspect of the Open Space/Recreation Element is implementation of the recommendations set forth in the document. Even the most innovative and comprehensive plan cannot succeed unless appropriate actions are taken to preserve the existing inventory of open spaces in the community. Additionally, it is paramount that flexible methods of open space acquisition and techniques of creating new open spaces be employed. The latter is especially true in an urbanized area such as Tehachapi where the population is slowly climbing, leisure hours are increasing, and the residents are making more recreationally oriented demands.

The land areas identified in the "Open Space Plan" have been defined as the open spaces that are of principal significance in Tehachapi. These major open space areas are natural open space reserves, bikeway/trail linkages, private open spaces, school grounds and parks.

The recommendations contained in the Open Space/Recreation Element are concerned with avoiding degradation by overuse, mismanagement, and urban encroachment of the resources and open space opportunities listed. However, because of time constraints and financial limitations, immediate implementation of each of the recommendations is readily acknowledged to be unfeasible. Therefore, primary consideration must be given to preserving and conserving these open spaces that are the most critical.

The following list of programs shall be carried out by the City of Tehachapi to implement the above goals, objectives and policies of the Open Space/Recreation Element of the Tehachapi General Plan.

A. RECREATION PROGRAMS, PARKS AND FACILITIES ACTION PROGRAMS

1. Require open space/recreation areas with new development.
2. Establish new community, neighborhood and sub-neighborhood parks.
3. Identify communities currently not served with sufficient amounts of parkland and recreational facilities. Concentrate efforts and available resources to add parks or recreational facilities in these areas.
4. The City will continually work with the Tehachapi Valley Recreation and Park District to implement the Tehachapi General Plan and the District Master Plan in order to achieve the goals of both plans.

Based on the evaluation of needs, an annual recreational program shall be developed.

B. OPEN SPACE FINANCING ACTION PROGRAMS

1. Establish a dedication program where the City may accept gifts of parkland and/or recreational facilities.
2. Amend the Zoning Ordinance to require that all development projects provide on-site pedestrian-oriented open space facilities or pay in-lieu fees for similar facilities nearby.
3. Require that developers of apartment or condominium projects provide a minimum proportion of recreational facilities as part of the open space requirements for such development.
4. Establish and implement a park acquisition program to meet current and future needs. Such a program shall:
 - a. Identify potential park sites by monitoring real estate activity within the City. When a site is made available for donation, purchase, condemnation, or open space easement donation or purchase, the City

should consider its appropriateness for use as a mini-park or, if contiguous with existing parks, as an extension of that park based on:

- ❖ configuration and usability for parkland,
- ❖ costs of acquisition and improvements,
- ❖ availability of revenue,
- ❖ compatibility with adjacent uses,
- ❖ loss of housing units, and
- ❖ site accessibility.

- b. Establish a trust fund to pay for the acquisition and development of new parks with the funds being derived from the following sources:
 1. General revenue funds,
 2. Tax revenue fund (in Redevelopment Project Areas),
 3. Developer assessments (through use of the Quimby Ordinance and exaction of commercial developments),
 4. Business or fund-raising contributions,
 5. Mello-Roos Community Facilities Act,
 6. Facilities bonding, and
 7. State and federal grants or loans.
- c. Utilize the funds to acquire and develop sites identified above and/or historically and culturally significant structures, which can be adaptively reused for public facilities.
- d. Use eminent domain to acquire additional lands for park development only when there is no feasible alternative, it is deemed in the public good, and the City's housing supply will not be adversely affected.
- e. The City shall establish a program to fund the construction and installation of public open space improvements (signage, entryway identification, and streetscape). Revenue sources may include General Funds, general obligation bonds, exaction from new development projects, and/or tax increment generated by new development in redevelopment project areas. In addition, the City shall solicit funding from state and federal sources for public improvements, as it is available in the future.

- f. Adopt and implement a parkland dedication ordinance with in-lieu fee provisions where residential developers contribute on a per-unit basis (per the Quimby Ordinance).

C. SAFETY, MAINTENANCE AND ACCESSIBILITY ACTION PROGRAMS

1. Continue and enhance cooperation between the Tehachapi Valley Recreation and Park Department and the Sheriffs Department regarding safety in parks.
2. Continue to ensure that City parks are designed to be accessible and meet the needs of the elderly, handicapped, and other persons with special needs.
3. No less often than once every five years the City shall review the status of the Open Space/Recreation Element.

D. PUBLIC, PRIVATE AND REGIONAL RESOURCE COORDINATION ACTION PROGRAMS

1. Investigate institutional land uses as providers or potential providers of open space and recreational uses and coordinate these resources with efforts to provide additional open space to areas in most need.
2. Continue coordination with the Tehachapi Unified School District to ensure availability of school recreational facilities for public recreation use during after school hours. Allocate City revenues to provide additional security for school facilities and upgrading of site recreational areas.
3. Encourage private contributions to recreational programs vis-a-vis the Chamber of Commerce, Board of Realtors, religious organizations, and other local associations.
4. Coordinate with private and public agencies for access to open space uses of easements within Tehachapi (including greenbelt uses, horse stabling and recreational uses), and develop a comprehensive plan for bicycle trails and pedestrian pathways in the City connecting parks, schools, and existing bike paths.
5. Encourage County efforts to maintain designated Natural Open Space Areas in a natural condition for hiking, horseback riding, nature observation and similar activities.

CONSERVATION ELEMENT

Adopted on October 18, 1999

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I. INTRODUCTION

This Element is primarily concerned with conservation of natural resources and with environmental issues which have an effect on such resources. A primary purpose of the Element is to provide guidelines for making decisions regarding natural resource conservation programs and needs. One of the first steps in preparing the General Plan Update is the identification of the community's natural resource conservation needs.

A. STATUTORY REQUIREMENTS

California Government Code Section 65302(d) requires: *A Conservation Element for the conservation, development, and utilization of natural resources, including water and its hydraulic forces, forests, soils, rivers and other waters, fisheries, wildlife, minerals, and other natural resources.*

This Element is closely tied to hazard and safety information in the Safety Element. The Open Space/Recreation and Land Use Elements delineate policies and practices for land uses developed using the natural and cultural resource information contained in this Element.

The scope of the Conservation Element includes programs for water, forests, soil, fisheries, wildlife, minerals and other natural resources, which may include paleontological, anthropological, and historical resources. The Conservation Element examines these factors, considers the planning steps and establishes priorities for the development of a comprehensive plan of action. The Conservation Element is intended to determine and influence the City's conservation trend, as well as to anticipate changes in the direction of concepts in conservation. It is designed to meet the present and future needs of the city residents at a level acceptable to the community.

Biological conservation has been described in different kinds of legislation at the Federal and State levels. Three goals which emerge as the most common are (1) the management of game species for sustained yield; (2) the conservation of endangered and threatened species; and (3) the preservation of balanced populations of species in their native habitats. Depending on which goal is to be pursued, quite different strategies may be employed. For endangered species, the strategy is to identify the species and protect critical habitat areas. The strategy for balanced populations is preservation of areas as wilderness. For each goal, the City, as a land and resource management agency, has responsibility for biological conservation.

Management and land use practices often conflict with the protection and preservation of the City's plant and animal species. The use of poisons and traps has led to the indiscriminate killing of many animals. However, the greatest threats to the survival of the various biological communities are urbanization and other forms of human intrusion. Problems related to urbanizing pressures, such as increased fire danger, as well as water, air and noise pollution have contributed to the degradation and/or destruction of many habitats.

The interdependence of all life forms and the ecological needs for a stable and well-balanced environment must be recognized so that a healthy coexistence between human and natural biological communities can be assured.

The County of Kern has adopted an Open Space and Conservation Element as part of their General Plan. It includes all of the unincorporated area of the county. Many factors considered in this regional plan are not applicable to a more restrictive plan such as the City of Tehachapi's. However, there are features in the county plan, such as water, soil and hydraulic forces of water, which are not limited to political boundaries and should be planned jointly by the City and County.

The City of Tehachapi's residents have a vested interest in the county area, which affects the quality of their lives. Besides the general interest, a major sphere of interest exists in the area surrounding the City. For this reason, the City has herein adopted goals and policy statements regarding such natural resources as forests and fisheries, which are not found within the City. Cooperation between the City and County planners is encouraged so the interests of all citizens can be protected.

II. RESOURCES AND THEIR MANAGEMENT

Natural vegetation has been severely altered or destroyed in and near all areas of urban-related activities. Populations of various plant and animal species have become either extinct or greatly diminished due to human intrusion and modification of their habitats. It is the intent of the Conservation Element to protect and maintain the City of Tehachapi's natural and cultural resources and to prevent their wasteful exploitation and destruction.

The Conservation Element supports the City's Land Use Element by integrating its goals and policies with other City and County General Plan Elements. Conservation of natural resources should be a leading determinant for land use relationships, housing, water, and waste management facilities. The major goal to protect our natural resources is directed at restoration and protection of the quality of the City's physical environment, natural and man-made, through conserving plant and animal life, historic resources, and natural watercourses.

The inventory of resources forms the core of the Conservation Element. The inventory is organized into seven major categories of natural and cultural resources. Hazards associated with each subcategory are discussed where applicable. Each resource category has identified the needs associated with it, its location, the entities responsible for its management and the issues related to the resource.

This inventory is not exhaustive, but rather it addresses the resources required to be identified by state and other legislation within a framework that allows for the systematic expansion of the inventory, as necessary. The maps included in the Conservation Element are a generalized depiction of the location of the resources and hazards inventoried.

A. AIR

During the past few years, air pollution has become a problem throughout the state. Many legislative acts are geared toward regulating and minimizing impacts to air quality.

As a result of the Clean Air Act, the federal government, through the Environmental Protection Agency (EPA), has established air quality standards. These National Ambient Air Quality Standards (NAAQS) define the levels of air quality that are necessary, with an adequate margin of safety, to protect the public health. The Federal Clean Air Act Amendments of 1990 required that primary (health related) standards be attained by 1999.

State standards cover the same pollutants as the federal standards, except for the addition of minimum air quality levels or hydrogen sulfide,

sulfates, vinyl chloride, and visibility-reducing particulates. There is an unspecified timetable for compliance with the state standards.

It is the responsibility of the state and local government agencies to provide a plan, which will assure that federal standards are achieved and maintained. If any state fails to provide an implementation plan, which assures that the ambient air quality standard, will be met, the EPA will then be responsible for providing such a plan in accordance with the Clean Air Act.

1. Resource Location

The City of Tehachapi lies within the Kern County portion of the Mojave Desert Air Basin (MDAB), which includes most of Riverside, and San Bernardino Counties, as well as small portions of Los Angeles and Kern Counties. The distinctive climate of Tehachapi is determined by its terrain and geographical location.

The Tehachapi Valley system represents a series of intermediate elevation valleys, which lie at the junction of the mountain ranges - the Sierra Nevada Mountains to the north and the Tehachapi Mountains to the south. This unique location, along with the City's relatively high elevation (4,000 feet) has allowed Tehachapi to be known as the "Land of Four Seasons". The topography and climate of this fairly mountainous region combine to make Tehachapi an area of low to moderate air pollution potential.

The Tehachapi area is designated as non-attainment for ozone (federal and state standards) and non-attainment for PM₁₀ (state standard). Air quality in the Kern County portion of the MDAB is determined by local emissions of pollutants, and topographical and meteorological factors which influence the transport of air pollutants from the San Joaquin Valley.

Approximately ten miles west of Tehachapi lies the San Joaquin Valley Air Basin. Monitoring of air quality is conducted in Mojave and Bakersfield. Short term monitoring in Tehachapi reveals ambient air quality is about the same as Mojave – better than San Joaquin.

2. Air Quality

Atmospheric pollutant concentrations depend upon the type, quality, height, and rate of release of pollutant emissions, as well as the associated meteorological conditions, which affect the dilution, diffusion and chemical reactions within the polluted air

mass. Air pollution forms either directly or indirectly from pollutants emitted from a variety of sources. Although some emissions are from natural sources, most emissions in the Tehachapi area are probably from man-made sources, such as combustion in vehicle engines, from evaporation of organic liquids, or through abrasions such as tires on roadways.

The regional area's prevailing winds occasionally carry pollutants from Bakersfield (San Joaquin Air Basin) into the Tehachapi Valley. The most recent data available show ozone and particulate matter concentrations in the MDAB occasionally exceed certain federal and state air quality standards.

The City of Tehachapi has significantly better air quality than Bakersfield, due to a lower emission inventory, the lack of temperature inversion layers common to the valley floor, and stronger winds which provide ventilation and adequate dilution of air pollutants.

Meteorological factors such as wind speed, wind direction, and the presence of atmospheric temperature inversions are important to the transport and dispersion of both primary and secondary air pollutants within the San Joaquin Valley Air Basin. Within the City of Tehachapi, winds blow with equal frequency from the west-northwest and from the east-southeast throughout the year. Winds speed are usually between four and twelve miles per hour. The prevailing wind pattern for the San Joaquin Valley Air Basin is northwest to southeast. As the air rises slowly out of the San Joaquin Valley Air Basin, it begins to change to a lighter density and is no longer capable of carrying the heavier pollutant particles with it; therefore, vertical mixing and dilution of air pollutants are limited. However, when air flows from the San Joaquin Air Basin to the MDAB, gaseous pollutants already in the air tend to remain in the air mass.

Vertical dispersion of air pollutants in the San Joaquin Air Basin is hampered by presence of a persistent temperature inversion in the layers of the atmosphere near the surface of the earth. Because of expansional cooling, temperature ordinarily decreases with altitude. A reversal of this tendency, wherein temperature increases with altitude, is termed an inversion. This can occur at the surface or at any elevation.

The San Joaquin inversion layer varies from a minimum 500 feet above sea level during winter months to a maximum of 2,500 feet. The City of Tehachapi lies at an elevation of approximately 4,000

feet above sea level. Emissions generated in the Tehachapi area tend to become dispersed due to significant daytime atmospheric vertical mixing induced by high surface temperatures. Because Tehachapi often lies above the normal height of the summer inversion layers in the San Joaquin Valley, transport of air pollution is hindered.

Air quality is dependent upon the location of the pollutant sources, the amount of pollution emitted, and the subsequent atmospheric dispersion of pollutants. Since the Tehachapi planning area is impacted by air pollution problems, it is important to control the locations of pollutant sources and the magnitude of emissions. Adverse affects of air pollution on people have been documented and evaluated by the EPA, which resulted in adoption of the National Ambient Air Quality Standards. Studies have shown crops and vegetation also sustain damage from air pollution. Short and long range pollution control strategies must be developed to minimize adverse air pollutant emissions impact in the Tehachapi area.

Long range control strategies shall focus on improvements and refinements of current stationary controls, in addition to focusing on transportation related control measures. Ridesharing programs, traffic flow improvements and new land use strategies are all measures designed to reduce vehicle use, thereby reducing transportation related emissions. East Kern will also anticipate San Joaquin Valley emissions reductions which will reduce transport of pollution from that area.

B. SOILS AND AGRICULTURE

Many factors influence the value, and predispose the appropriate utilization of soils by modern civilization. These factors include physical and chemical constraints imposed by the natural processes which result in the formation of soils. Among these constraints are steepness of slope, relative compaction, permeability and natural fertility. Availability of sufficient water for irrigation of soils suitable for agriculture also restricts their potential use. Additionally, some soils are highly susceptible to erosional factors; improper cut and fill grading operations conducted during development can exacerbate this potential.

It is important to preserve prime agricultural soils for production of food and fiber, and to appropriately utilize soils with suitable compositional characteristics for bearing structural loads. It is also important to minimize erosion of soils, particularly erosion induced by inappropriate grading operations undertaken during urban development. Soil erosion problems

are a major conservation need in the Tehachapi area. Urban development without proper associated drainage facilities results in both increased runoff volume and velocities leading to increased erosion. Unbalanced grazing distributions resulting from climatic factors and overstocking can also result in otherwise avoidable erosion.

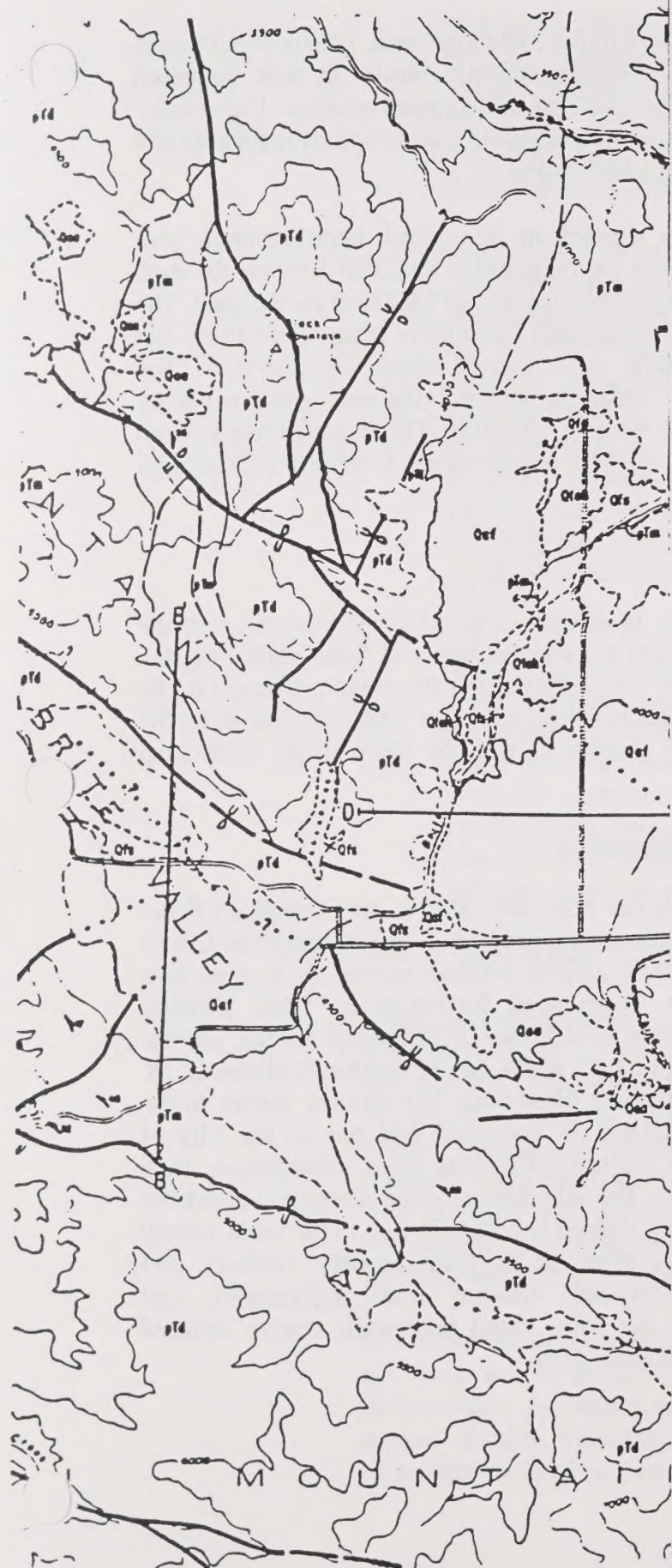
The Tehachapi Valley is situated in an upland inter-mountain area separating the Mojave Desert, at an elevation of 3,000 feet, on the east, from the San Joaquin Valley, at an elevation of 1,000 feet on the west. The Tehachapi Valley system is composed of a series of discreet, relatively flat surfaces, the aggregate form of which is elongated east-west. The Tehachapi Mountain Range bound the Valley to the south and east and by the Sierra Nevada Mountain Range to the north. The elevation ranges from 4,000 feet mean sea level to 7,700 feet mean sea level in the Tehachapi Mountains.

1. Landforms

The most important landforms or physiographic sections in the Tehachapi area are (1) the alluvial fans and flood plains; (2) the basin areas; (3) the low terraces; (4) the high terraces; (5) the uplands; and (6) miscellaneous land types. These are shown on the Physiographic Map (Figure 1) and the Generalized Soils Map (Figure 2).

2. Alluvial Fans and Floodplains

The alluvium which has been deposited in the Tehachapi-Brite-Cummings Valley is extremely diverse. In Cummings Valley, most of the alluvium is from granitic sources, except for a small area near the California Correctional Institution for Men. Granitic alluvium is dominant in Brite Valley. In Tehachapi Valley, granitic alluvium is dominant on the south side of California Highway 58, except where the alluvium blends into low terraces farther to the south. North of Highway 58 and north and east of the City of Tehachapi, medium textured alluviums from metamorphic rock sources predominate. The alluvium of Sand Canyon (considered part of the Tehachapi Valley) is complex, due to the wide variety of rocks. Here the alluvium is predominantly medium and moderately coarse-textured material from sedimentary and metamorphic rocks, but some small moderately coarse textured fans from granitic rocks do exist.



EXPLANATION

QUATERNARY	Qfc	COARSER STREAM DEPOSITS AND RECENT FAN DEPOSITS	Qts	FINER STREAM DEPOSITS AND FLOOD PLAIN SILTS
	Qaf	ALLUVIAL FAN DEPOSITS	Qoa	OLDER ALLUVIUM
PLEISTOCENE	Qan	ANDESITE	Qsc	SAND CANYON FORMATION
	Qb	BASALT		
TERTIARY	Qteh	TEHACHAPI FORMATION		
	Thf	HORNED TOAD FORMATION	Tcp	CACHE PEAK FORMATION
	Td	BOPESTA FORMATION		
	Tk	KINNICK FORMATION		
	Tw	WITNET FORMATION		
	pTg	GRANITE		
PRE-TERTIARY	pTd	DIORITE, QUARTZ, DIORITE, GRANODIORITE, QUARTZ MONZONITE		
	pTm	GNEISS, SCHIST, LIMESTONE, QUARTZITE, SOME IGNEOUS INTRUSIVES		

MAP LEGEND

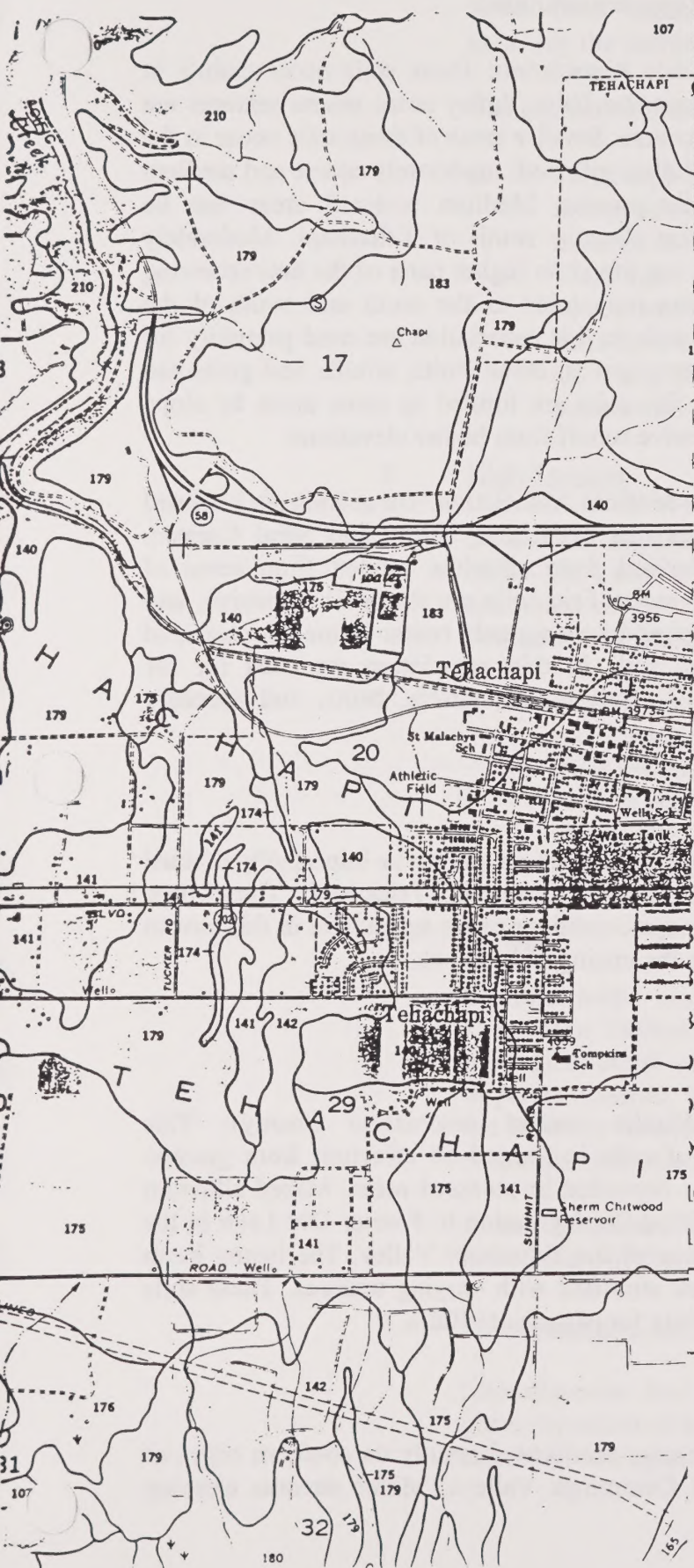
- FAULT SHOWING RELATIVE MOVEMENT (Dashed where approximately located, dotted where concealed)
- THRUST FAULT SHOWING DIP DIRECTION OF THRUST PLATE (Dashed where approximately located)
- FORMATION CONTACT (Dashed where approximately located)
- ALLUVIAL CONTACT (Dashed where approximately located)
- △ ATTITUDE OF BEDDING PLANES
- △ ATTITUDE OF BEDDING PLANES OR SCHISTOSITY PLANES IN METAMORPHIC ROCKS
- GEOLOGIC SECTION LINE
- TRACE OF SYNCLINAL AXIS
- LANDSLIDE SHOWING DIRECTION OF MOVEMENT

Source: Michael - McCann Assoc.
Engineering Geology

LOCKMAN & ASSOCIATES
CONSULTING ENGINEERS & PLANNERS

Geology of the Tehachapi Valley System
Tehachapi General Plan Update
Tehachapi, California

Figure 1



NO SCALE

INDEX TO SOIL MAP UNITS

- 17 Arujo-Friant-Tunis complex, 15 to 50 percent slopes
- 18 Arujo-Friant-Tunis complex, 50 to 75 percent slopes
- 12 Edmunston gravelly sandy loam, dry, 30 to 50 percent slopes
- 10 Havala sandy loam, 0 to 2 percent slopes
- 11 Havala sandy loam, 2 to 5 percent slopes
- 12 Havala sandy loam, 5 to 9 percent slopes
- 13 Havala sandy loam, 9 to 15 percent slopes
- 16 Hesperia sandy loam, 5 to 9 percent slopes
- 12 Nacimiento loam, 30 to 50 percent slopes, eroded
- 17 Pits
- 15 Psammments-Xerolls complex, nearly level
- 14 Steuber sandy loam, 0 to 2 percent slopes
- 15 Steuber sandy loam, 2 to 5 percent slopes
- 16 Steuber sandy loam, 5 to 9 percent slopes
- 19 Tehachapi sandy loam, 0 to 2 percent slopes
- 20 Tehachapi loam, 15 to 30 percent slopes, eroded
- 11 Tehachapi cobbly sandy clay loam, 2 to 30 percent slopes
- 13 Tehachapi Variant sandy clay loam, 15 to 50
- 16 Tujunga loamy sand, 2 to 5 percent slopes
- 13 Walong sandy loam, 15 to 30 percent slopes
- 14 Walong sandy loam, 30 to 50 percent slopes
- 19 Walong-Edmundston association, steep
- 10 Xerorthents, loamy, very steep
- 11 Xerorthents-Rock outcrop complex, very steep

Source: USDA Soil Conservation Service

LOCKMAN & ASSOCIATES
CONSULTING ENGINEERS & PLANNERS

Soils of the Tehachapi Valley
Tehachapi General Plan Update
Tehachapi, California

The following soil types are exhibited:

- a. Visalia-Oakdale Association: These soils occur mainly in the Cummings and Brite Valley areas where textures are moderately coarse. Smaller areas of these soils occur in the Tehachapi Valley with both moderately coarse and medium textured soils present. Medium textured areas can be located almost directly south of Tehachapi. Moderately coarse areas are found on higher parts of the fans receiving alluvium from mountains to the north and south of the valley. The soils in this association are used primarily for potatoes, pears, apples, stone fruits, alfalfa, and grass sod production. The soils are limited in some areas by slope and by excessive runoff from higher elevations.
- b. Eric-Zamora-Molinas Association: These soils are confined almost entirely to Tehachapi Valley and Sand Canyon. They are derived from alluvium eroded from areas of sedimentary rocks. Eric soils are the most extensive, and are characterized by moderately coarse to medium textured profiles. The soils in this association are used for the production of small grains, alfalfa, fruits, and specialty crops.

3. Basin Areas

Depression areas where the soils are poorly or imperfectly drained are located in the eastern portion of Tehachapi. These poor infiltration and drainage conditions cause agriculture in this area to be limited mainly to the raising of livestock.

Soil types include:

- a. Chino - Visalia variant association (loamy): This association of soils is formed on alluvium from granitic rock sources deposited in recessed areas. Mixed alluvium has nearly filled the depression in Proctor Dry Lake in the eastern portion of the Tehachapi Valley. The loamy basin land soils are stratified with varying textures. These soils are used mainly for pasture or alfalfa.

4. Low Terraces

Soils in the low terraces are located mainly on southern edges of the Tehachapi and Cummings Valleys. Minor streams carrying

water from higher uplands have caused dissection in places exposing the claypan subsoil of the Tehachapi soils.

The characteristic soil type is:

- a. Tehachapi Chualar association: The soils of this association are developed on alluvium from granitic sources. This material is quite cobbly in some places and lies under the Tehachapi soils. The Tehachapi soils have medium to coarse textured surfaces with clay subsoil. The Chualar soils have similar surfaces with less clayey subsoil, which are sandy clay loams. These soils are used for small grain, potatoes and pasture.

5. High Terraces

Soils of the high terraces are restricted to areas immediately north of the City, east and west of Highway 58. The high terraces are composed of mixed cobbly and gravel material from granitic, volcanic and metasedimentary sources.

- a. Brite Terrace escarpment association: The Brite clay loams and terrace escarpments compose the high terrace. The Brite soils have clay loam surfaces with occasional mixed cobbles and subsoil horizons of clay. The very steep slopes where soils are weathered are classified as escarpment. These soils are used entirely for range.

6. Uplands

Granitic rocks surround much of the Tehachapi, Brite and Cummings Valleys. Variation in rainfall, attributed to elevation, has a great effect on the kind of soil produced from the same kind of parent material. Various aspects relating to degree of slope alter the intensity of solar radiation that occurs at any given instance which also influences the types of soil produced.

A variety of soil associations are encountered in upland areas. Suitable use of these soils is limited to rangeland.

7. Miscellaneous Land Types

Miscellaneous land types scattered throughout the region are generally mixes of soil types and not true soils. These various soils either have no agricultural value or offer only very limited grazing.

8. Surface Blocks

The Tehachapi Valley surface area is subdivided into three distinct geologic, categorical blocks of land: Sierra Block, Bear Mountain Block, and Tehachapi Block, for descriptive purposes.

An ancient surface of erosion, the Tehachapi surface, contains preserved remnants of significant historical importance. These remnants, which are considered to be part of the Tehachapi surface, have been recognized from Cache Peak and the Tehachapi Pass area north of the town of Mojave, as far west as the foothills northwest of Near Mountain at the edge of the San Joaquin Valley.

9. Sierra Block

The Sierra Block is located to the north of the City of Tehachapi. Slopes of the Sierra Block rise northward at moderate gradients except where streams have cut steep-sided channels. Most streams are small and flow southward into the Tehachapi Valley. Outside the canyons, sparse vegetation exists throughout this block.

The Bear Mountain Block, bordering the Valley at its western edge, is separated from the Sierra Mountains to the north by Tehachapi Creek. This block is approximately 11 miles long and 5 miles wide and is truncated by steep scarps at the northwest and southeast ends. Sparse vegetation exists in this block except in small surface stream channels and at the northern end where north-facing slopes are densely covered.

10. Tehachapi Block

The Tehachapi Block is part of the Tehachapi Mountains at their northernmost end. It forms the southern boundary of the Tehachapi Valley. Like the Bear Mountain Block, the Tehachapi Block has preserved along its crest a part of the ancient erosion surface. Highest elevations are at Cummings Mountain, 7,753 feet, and near Double Mountain, at 7,988 feet. Aerial photos of the Block's northern slope show numerous small, essentially flat surfaces tilted uniformly southward which are interpreted as remnants of the ancient surface.

11. Tehachapi Valley

The Tehachapi Valley is composed of dislocated remnants of the Tehachapi surface brought into juxtaposition with scarps of the faults that displaced them. The valley has the characteristics of

being a "graben" (an area that has settled along fault lines) except that the northern fault is a high angle reverse fault with considerable more displacement on the south side than on the north.

The geology of the area is most complex. The oldest rocks are metamorphic and consist of bands of gneiss, schist, recrystallized limestone and quartzite. Fairly long intervals appear to separate the times in which certain rocks were metamorphosed. Earlier intrusions were of basic rocks. In later times, the intrusions involved more acidic types.

Various ages of alluvial deposits dominate the valley floor. A geologic unconformity separates the metamorphic and igneous complexes from the sedimentary, pyroclastic and volcanic rocks which overlie them.

12. Agriculture and Soil Classes

The first crops farmed in the Tehachapi Valley were dry farmed grain, wheat and barley. These crops are still raised today in quantities predicated on amount of rainfall supplied by Mother Nature. At various times in the valley, vegetables such as cabbage and carrots were raised in small quantities. Today, 249 acres of carrots are produced in Cummings Valley and 473 acres of carrots are grown in Tehachapi Valley. Small quantities of raspberries, chestnuts, onions, and lilacs are raised in the Tehachapi Valley.

The Greater Tehachapi Area has a climate which favors high germination quality seeds. Historically, the area has seen considerable seed production including grass, hay, lettuce and onion. Among the crops of fairly extensive production were sugarbeet, potatoes, peaches, alfalfa, clover, and various grasses.

In 1880, Moses Hart was successful with apple growing. A period of orchard expansion began about 1909 reaching a maximum of about 3,000 acres. After World War I, along with the general agricultural depression, many orchards declined. This trend has continued over the more recent past due to the increased, competitive outside market supply and the increase in market distribution costs. The total acreage of apple orchards in the Brite, Cummings and Tehachapi Valleys as of 1998 is approximately 496 acres.

Agricultural resources must be carefully assessed in order to develop a program of conservation while maintaining high

productivity. The natural resources required for agricultural production, primarily soils and water, must be judiciously guarded. At the same time, potential adverse impacts on the environment, particularly air and water quality must also be recognized. Case in point, several shallow wells in Tehachapi Valley have been contaminated by nitrates due to agriculture activity.

The California Land Conservation Act (also known as the Williamson Act), passed in 1965, authorized counties and cities to designate agricultural preserves and to assess these lands on the basis of present use as long as the property owner agrees to continue that use for 10 years.

Lands included in the Williamson Act are limited to a parcel of land consisting of approximately 80 acres, located south of Highway 58 and east of Willow Springs Road.

The following table compares recent, 1998 and 1968 land areas devoted to production of various crops cultivated within the Tehachapi Valley.

Crop	Land Area (acres)				
	<u>1998</u>	<u>1995</u>	<u>1991</u>	<u>1988</u>	<u>1968</u>
Peaches	4	1	20	32	117
Carrots	473	511	0	*	*
Cherries	3	13	25	29	*
Apples/Apple Pears	287	334	611	709	572
Pumpkins	0	1	1	3	*
Pears	2	1	15	15	283
Lilacs	21	27	30	38	30
Turf	0	0	117	223	277
Wheat/Barley & Rye/Oats	278	32	330	400	2,411

* - Data not available

It is evident from this historical information that utilization of land for agricultural production is being severely diminished. The acreage utilized to grow the majority of crops reflects a steady decline with the exception of carrot production, which was introduced as a field crop relatively recently in order to extend the growing season in the industry. It should be noted however, that carrots must be periodically rotated in order to prevent diseases which may have an impact on long term production viability. As the population of the Tehachapi and surrounding valleys increases, demand for increased quantities of these and other food crops will similarly rise.

As the population grows, land will inevitably be consumed by commercial, industrial and residential developments. Of essential consideration in choosing lands for any of these potential developments, should be the inherent suitability of this land for agricultural production.

The soils in the Tehachapi area vary widely in profile depth and degree of erosion, presence of salts, wetness and other factors. A classification system developed by the Department of Conservation Farmland Mapping and Monitoring Program is used to map soils within the General Plan area.

There are four land categories as listed and defined below incorporated into the Farmland Mapping Monitoring Program.

13. Prime Farmland

Prime Farmland is land which has the best combination of physical and chemical characteristics for the production of crops. It has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops when treated and managed, including water management, according to current farming methods. Prime Farmland must have been used for the production of irrigated crops at some time during the two update cycles prior to the mapping date. Prime Farmland does not include publicly owned lands for which there is an adopted policy preventing agricultural use.

14. Farmland of Statewide Importance

Farmland of Statewide Importance is similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to hold and store moisture. Farmland of Statewide Importance must have been used for the production of irrigated crops at some time during the two update cycles prior to the mapping date. Farmland of Statewide Importance does not include publicly owned lands for which there is an adopted policy preventing agricultural use.

15. Unique Farmland

Unique Farmland is land of lesser quality soils used for the production of specific high economic value crops (as listed in California Agriculture produced by the California Department of Food and Agriculture) at some time during the two update cycles prior to the mapping date. It has the special combination of soil quality, location, growing season, and moisture supply needed to produce sustained high quality or high yields of a specific crop when treated and managed according to current farming methods. Unique Farmland is usually irrigated, but may include nonirrigated orchards or vineyards as found in some climatic zones in California. Examples of crops on Unique Farmland include oranges, olives, avocados, rice, grapes, and cut flowers. Unique Farmland does not include publicly owned lands for which there is an adopted policy preventing agricultural use.

16. Farmland of Local Importance

Farmland of Local Importance is land of importance to the local agricultural economy, and is determined by each County's Board of Supervisors and local advisory committees. Examples of

Farmland of Local Importance could include dairies, dryland farming, aquaculture, and uncultivated areas with soils qualifying for Prime Farmland and Farmland of Statewide Importance. Farmland of Local Importance does not include publicly owned lands for which there is an adopted policy preventing agricultural use. See A Guide to the Farmland Mapping and Monitoring Program for definitions specific to each county.

Of the above referenced Farmland categories two (2) of the categories appear to a significant degree in the Tehachapi Valley area; Prime Farmland and Unique Farmland. Within the General Plan Study area there are approximately 4,000 acres in combination of Prime and Unique Farmland categories. Figure 3 illustrates the location and distribution of Prime and Unique Farmlands. Of this acreage approximately 3,400 acres are designated as agricultural land uses in the General Plan.

C. WATER RESOURCES

Water issues impact almost every activity within the City, ranging from personal consumption in the residential and commercial sectors, to agricultural irrigation and municipal facilities. Policies contained in the City's Land Use Element promote the use of new wastewater reuse and disposal methods that contribute to water conservation. The City's new wastewater master plan incorporates agricultural and other irrigation alternatives for the disposal of reclaimed wastewater, displacing the use of potable water for these purposes.

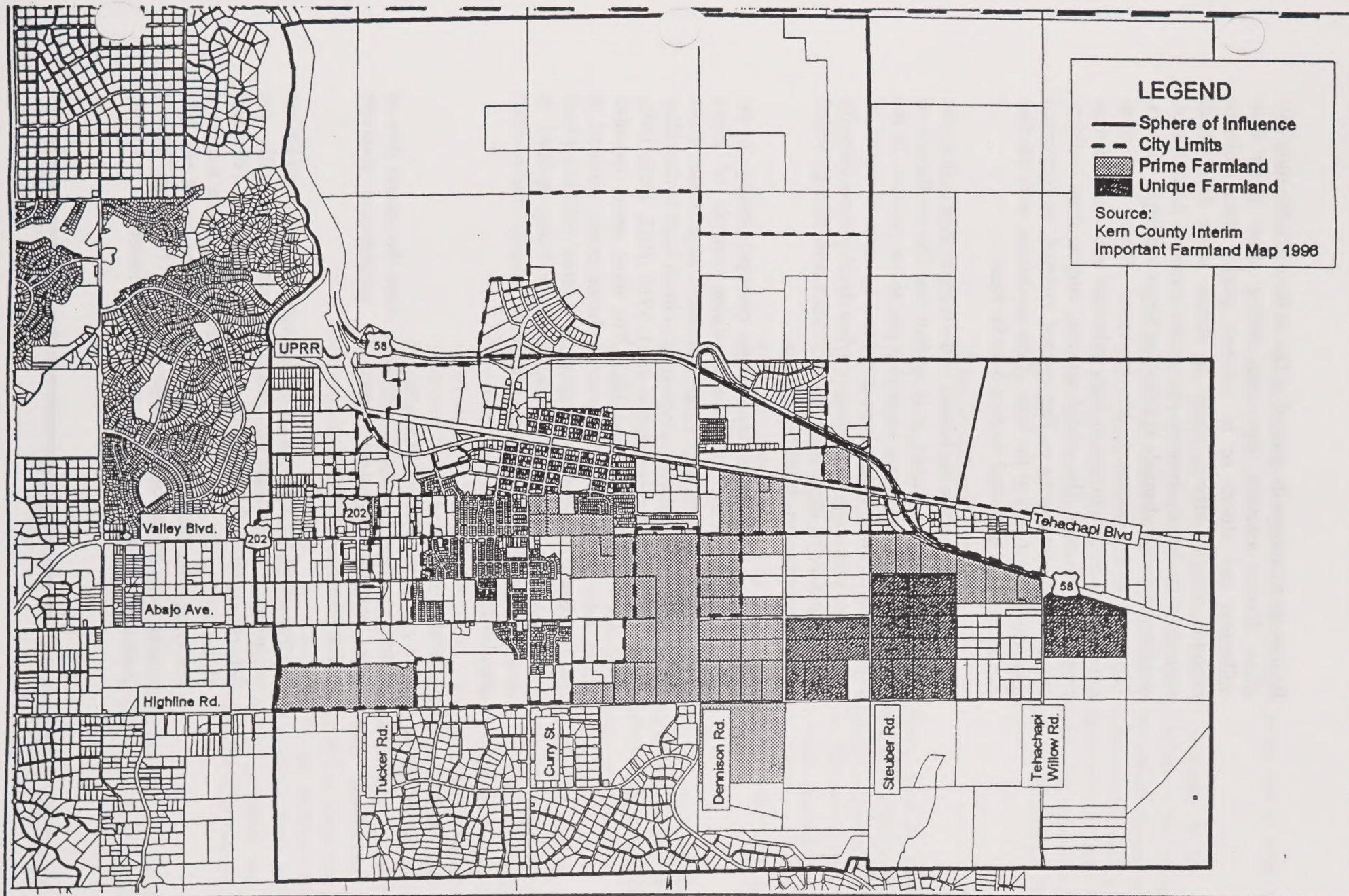
Policies in this Element attempt to conserve water by reducing the waste of water resources, and encouraging the increased use of reclaimed wastewater. These policies will help to reduce the water needs of the City of Tehachapi.

1. Surface Water

Uncontrolled runoff occurs frequently in the Tehachapi area, resulting in erosion, sedimentation and water damage. Widely varied amounts of moisture are received from storm to storm. Half a season's total rainfall may occur in one storm or the season's total may be received from August through May in a series of light storms. The most damaging runoff flows occur as a result of summer convective storms.

The most serious damage occurs in the area included and surrounding the City, due to the presence of improvements and

highly developed agricultural utilization. Deleterious runoff from Blackburn and Lime Kiln Canyons and Cook and Wyman subwatersheds are the most significant within the Tehachapi area. All runoff from Antelope Creek and Cook and Wyman subwatersheds discharge into the Tehachapi Valley. Runoff from Blackburn Creek flows toward Tehachapi Valley and Proctor Lake to the east.



Rain water penetrates the ground as fast as the soil infiltration will allow. Excess amounts, from rain falling either faster than infiltration can absorb or in volumes greater than moisture retention capacity allows, results in surface water flow which aggregates in stream channels and drains traveling downstream, merging with other channels and forming larger and larger streams. These streams, discussed above, move down the steep mountainous water courses at high velocities and cause erosion proportional thereto. The eroded material, ranging from boulders the size of Volkswagens to fine grained material, are deposited upon the alluvial fans at the base of the mountains, with the fine grained material deposited furthest from the base.

Tehachapi lies nearly at the bottom of the merging fans built by the aforementioned four creeks. It is evident that this confluence of water places the town in a somewhat precarious position. In the past, much of the area has been inundated by water to depths of several feet causing severe damage. Urban developments intensify flood potential, by decreasing the infiltration area through which storm waters may be absorbed.

Antelope and Blackburn Creeks are the principal drainage in the vicinity of the City. Historically, during periods of heavy precipitation, these drainage courses produced large surface flows which spread across the low sloping agricultural lands in the valley floor. Major flooding occurred in 1913, 1914, 1932, 1938, 1945, 1955, 1958, 1963, 1970, and 1983. The most severe recorded storm, estimated to be a two percent chance event, occurred in 1932. Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) are presently being updated to accommodate Blackburn Dam and other recently implemented flood control measures.

2. Groundwater

A drainage basin is defined as an area where the natural flow of water thereon ultimately enters the groundwater reservoir contained within the basin.

The Tehachapi Valley has a closed groundwater basin with limited recharge. The groundwater basin surface is generally the Tehachapi Valley floor, bounded on the south by the Tehachapi Mountains, on the north by the Sierra Nevada's, on the west by a low-lying ridge connecting these two ranges, and on the east by a similar ridge separated by Proctor Gap. The Tehachapi basin is generally elongated in an east-west orientation, extending

approximately 11 miles at the longest point and 5 miles at the widest point.

The direction of groundwater flow is generally to the north, following the ground surface topography. Inflow to the surface and subsurface water from the surrounding watershed replenishes the basin. Surface outflow from Tehachapi Valley occurs during times of heavy storm, via Tehachapi Creek to the west and Cache Creek to the east. Subsurface outflow is restricted by the impervious rock outcroppings in the Tehachapi Creek and by the narrow Proctor Gap.

3. Water Quality and Quantity

The average annual safe yield of groundwater from the basin has been determined to be 5,500 acre-feet. Excessive withdrawal from the groundwater basin for agricultural irrigation between 1951 and 1973 depleted much needed water, dropping the basin's water level 146 feet. Recognition of this resources overuse resulted in a court action, whereby an annual consumption limitation of 1,585 acre-feet was established for the City of Tehachapi. Total water use by the City in 1989 was 1,425 acre-feet.

Laboratory analyses of the groundwater in the area classifies the water as excellent for domestic and agricultural uses. At the present time groundwater requires no treatment for municipal and industrial use. A summary of findings is given in Table 1.

The Tehachapi - Cummings County Water District imports water from the State Water Project via the California Aqueduct and a pipeline/water system constructed in 1972-73. The water district's ultimate annual entitlement, administered through the Kern County Water Agency, is 20,000 acre-feet: 5,000 acre-feet of agricultural water and 15,000 acre-feet of municipal and industrial water. The district's entitlement for 1986 was 11,300 acre-feet: 9,400 acre-feet for municipal and industrial use and 1,900 acre-feet for agricultural use. In 1986, the districts actual water importation was approximately 1,280 acre-feet. The majority of this water was used for irrigation purposes. The remainder of the district's annual entitlement is sold, via the Kern County Exchange Pool, to other water users. The City of Tehachapi does not presently use state water, as this water requires treatment and the City has no such facility.

The combination of limited groundwater pumping and imported water supplies has helped relieve the groundwater deficit. Present

depth to groundwater in the Tehachapi Basin ranges from 0 - 300 feet below grade. Groundwater levels have recovered some 40 - 45 feet since 1978.

The City of Tehachapi's municipal water supply system consists of three storage tanks with a total capacity of 2.76 million gallons, four water wells, and a distribution system of 4-inch to 16-inch water lines. Because of problems associated with distinct differences in water pressure from one part of the City to another, and daily water loss due to reservoir overflow, a water service expansion project was undertaken in 1991 to resolve some of the existing problems. The expansion included the extension of several thousand feet of main water lines to the southern and eastern valley, repair and improvement of the current system, the drilling of a 603 foot deep water well, and the installation of a 1.5 million gallon water tank above the Antelope Creek flood control facility.

4. Water Conservation

The use of water conservation measures can reduce the water demands and wastewater flows of residential, commercial, industrial and other system users. This in turn can affect the need for new capital facilities. These factors, the projected needs and the adequacy of existing water and wastewater facilities, are two of the determining factors that need to be addressed in evaluating the implementation of development fees.

The State of California, Department of Water Resources, has recently published information for over 50 water conservation measures from a variety of sources.¹ Detailed information on each water conservation measure is provided, including water savings and the cost of the measure. The amount of savings contributed by water conservation measures depends on the type of fixtures or system installed, the land use, and the number of users. Water conservation measures may satisfy conservation and peak reduction objectives. Conservation objectives are met by any measure that saves water, and has even savings throughout the year. While, peak reduction objectives are met by measures which have relatively more savings during the peak season than during the rest of the year, and thus satisfy both the conservation and peak reduction objectives. Additionally, some measures are applicable to just new or just existing buildings, not both, such as toilet tank displacement bags which are appropriate for existing residential and commercial customers with non-conserving toilets. They are not relevant for new construction which is required to install low-flush toilets.

The secondary benefits associated with water conservation measures include increased energy savings and reduced wastewater flows.

In 1990, the City of Tehachapi adopted a Water Conservation Ordinance (No. 90-14-576), effective October 1990. In summary, the ordinance requires all new construction to meet requirements for interior plumbing, and all non-residential water users, including hotels, motels, other commercial, and industrial uses, that undergo expansion or remodeling, to retrofit plumbing fixtures to meet low water-use standards. The ordinance also set requirements for non-residential landscaping, including turf area limits, use of low-water use plant materials, and irrigation systems. In addition, the City of Tehachapi conditions new development to utilize drought tolerant and native landscaping to the greatest extent possible, pursuant to AB 325 and the City of Tehachapi Landscape Guidelines.

The ordinance also prohibits anyone from wasting water supplied through the City's distribution facilities. Activities noted in the ordinance which are considered to be wasteful include excessive watering of landscaping and agricultural areas; watering of hard-surfaced areas by hosing; unrepaired breaks or leaks in plumbing or distribution systems; watering between the hours of 10:00 a.m. and 4:00 p.m., use of water by governmental entities for water and sewer system maintenance, and fire personnel training.

- 1) California Department of Water Resources. *Water Plan, Water Conservation Assumptions*. October 1989.

TABLE 1

Ionic Content of Groundwater Dissolved Solids
(Parts per million)

	Tehachapi Basin			Brite Basin			Cummings Basin		
	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
Ca	96	18	49	94	70	82	82	46	68
Mg	37	9	15	34	21	27	25	13	19
Na	44	6	21	7	5	6	43	14	32
K	.9	0	.2	--	--	--	--	--	--
CO ₃	--	--	--	--	--	--	--	--	--
HCO ₃	324	166	223	299	296	297	244	183	227
SO ₄	44	4	20	118	23	70	137	20	80
Cl	24	10	15	14	12	12	32	18	25
NO ₃	9	0	4	--	--	--	13	--	4
B	.20	0	.12	.25	.15	.20	.25	0	.10
Ec _x 10 ⁶	625	369	458	770	550	660	640	470	530
Percent Sodium	--	--	26	--	--	2	33	19	16
pH	--	--	--	--	--	--	8.4	7.9	8.1
Hardness (ppm CaCO ₃)	--	--	170	--	--	250	--	--	300
TDS	--	--	300	--	--	430	--	--	344

Source: Michael McCann, Associates, 1962.

D. MINERALS

Limestone represents the most significant mineral resource in Tehachapi. Because of its location on the alluvial fans of three different creeks, much of the Sphere of Influence overlays extensive aggregate resources. However, use of some of this resource has been precluded by urbanization or agricultural use of the land. Current, sources of aggregates are located to the north of the City. There is one mineral extraction site just outside the Sphere of Influence.

California State General Plan Guidelines requires that plans identify significant resource areas and develop management policies for them. The Surface Mining and Reclamation Act of 1975 (SMARA) requires the Division of Mines and Geology to identify regionally significant resource sites. Because of the 1975 Act, site reclamation has become an integral part of the mineral resource extraction process. The Legislature enacted SMARA to ensure that:

Adverse environmental effects are prevented or minimized and that mined lands are reclaimed to a usable condition which is readily adaptable for alternative land uses.

The production and conservation of minerals are encouraged, while giving consideration to values relating to recreation, watershed, wildlife, range and forage, and aesthetic enjoyment.

Residual hazards to the public health and safety are eliminated.

E. BIOLOGY

To preserve species in nature we need to preserve whole biological communities in the environment in which they live; these make up "ecosystems". We cannot easily predict the effects of changes in these systems and, therefore, we must attempt to maintain all the species and all aspects of the environment with some management. This results in conservation of species diversity as a measure of the preservation of the ecosystem. Federal and state laws identify specific species and their habitats to be protected.

Natural ecosystems, which are conserved, are productive, and the human population utilizes many of these products in the following ways. Of major concern in Tehachapi are water production and watershed protection. Hunting, fishing, and outdoor recreation are consumptive uses but often rely on the preservation of natural ecosystems to continue. Native Americans utilize plants and animals for spiritual as well as nutritional and medicinal needs. Also, the Native American culture which

still exists in the region ranges in its use of the natural ecosystems from the spiritual values of bear and condors, to the utilitarian values of tules and grasses for basketry. It is very apparent that open, natural landscape is itself significant as a whole.

1. Vegetation

Natural vegetation in the City of Tehachapi has been severely altered near all areas of urban and agricultural activity. However, much of the Planning Area is still covered by native vegetation. These vegetation associations reflect a combination of soils, temperature, precipitation and elevation.

Tehachapi is located at the southern end of the snowy regions of the west where snow falls and stays on the ground (a day, a week, or all winter) every year. Of the three snowy-winter climates in the Western United States, the one in which the Greater Tehachapi area lies is the coldest. Any or all of the three factors that can make cold winters can cause the cold of the region: latitude, influence of continental air masses, and elevation.

Hot summers and pronounced winters give the area sharply defined seasons, without the severe winter cold or enervating humidity of the Eastern United States. The climate pleases plants that require a marked seasonal pattern to do well - peony, iris, lilac, and flowering cherry, for example. Deciduous fruit trees that require a marked seasonal pattern do well also; the climate region is noted for its pears, apples, peaches, and cherries.

In the Tehachapi region, the typical growing season (period between last frost in the spring and first frost in the fall) lasts not much longer than 100 days - although it may average as high as 180 days in some parts. Throughout most of the Tehachapi area, frosts can occur on any day of the year.

Although agriculturalization, heavy grazing and urbanization have modified the native trees, shrubs and grass in the region, a variety of natural vegetation types are located within the Tehachapi transverse range.

2. Non-native Grassland

This type of vegetation constitutes the majority of the Greater Tehachapi Area. Such range grass types as slender wild oat, red brome grass, western ryegrass, and the native perennial *Stipa* grass

make up much of the grassland plant community. Many of the types of grasses present were brought into the area from Western Europe.

An analysis of species of grass growing in the Tehachapi Valley reveals that twice as many are non-native and were brought to the rangelands of California with the cattle and horse shipments during the last century, resulting in a significant reduction of native species of grass being displaced by exotic species.

3. Chaparral

Chaparral constitutes the next most abundant vegetative type. Chaparral areas appear to be the least disturbed and also serve as the best wildlife cover and food source. It is a mountainside vegetative type of community which is composed of fire-adapted, broadleaf sclerophyllous scrub. Among the indicator species are such shrubs as rabbitbrush, wild lilac, manzanita, goldenbush, buckbrush, chaparral yucca, flannelbush, winterfat shrubs and the larger sagebrush. The rabbitbrush is most visible in the late summer and fall months when it blooms with abundant yellow blossoms. These plants provided browse for local populations of deer as well as the growing livestock industry, over the past century. A variety of wood shrub species serve effectively for erosion control, particularly along the banks of the several drainage channels, as well as rocky, steeper slopes.

4. Valley Oak Woodland

This is an open grassy understoried savanna, rather than closed canopy woodland. Large oaks are the only oak species present, with Quercus lobata - Valley Oak or California White Oak standing well spaced in the foothills of the Sierra Nevada and Tehachapi Mountains.

The Valley Oak is native to interior valleys, Sierra foothills, and Coast Ranges away from direct coastal influence. As California's mightiest oak, the Valley Oak often reaches heights of 70 feet or more, with equal or greater spread. Trunk and limbs are massive, with thick, ashy gray, distinctly checked bark. Limbs often are picturesquely twisted, and the long, drooping outer branches sometimes sweep the ground. These, the largest of California oaks, grow on deep, well-drained soils, and indicate more subsurface moisture than the blue oaks of the nearby slopes. The oak's richest habitats within the Tehachapi area have been lost to agriculture, grazing, woodcutting, and urbanization.

In 1850, the Valley Oak covered more than a million acres in the interior valleys of the state, while today only 10,000 acres of this natural valley oak woodland remain. The City of Tehachapi is joining many cities and counties in California in efforts to save these oaks from further depletion by drafting and implementing an Oak Tree Preservation Ordinance.

5. Non-serpentine Digger Pine Woodland

This vegetation type grows in sequential regions, below mixed conifer forests, following such disturbances as fire and heavy grazing. Indicator species for this vegetation type include Pinus sabiniana (Bull Pine), Blue Oak, California Juniper, and Bigberry Manzanita. It should be noted that the term Digger Pine is associated with a derogatory term "Digger Indians" and as such has more recently been changed to Bull Pine. This reference will be used throughout the balance of the text as a more acceptable alternative to the more commonly used Digger Pine reference.

Tehachapi is located within the southern end of California's Bull Pine Belt, which appears over quite a few thousand square miles in the regions west of the Sierra-Cascades. Because of the influence of latitude, the climate common to this belt is found at middle elevations in California (the low mountains, most of which can be identified by native Bull Pines). The understory of this open Savannah woodland habitat in the Tehachapi area has been severely grazed, but various shrubs can be observed, including Coffeeberry, Rock Gooseberry, and Interior Live Oak.

6. Southern Willow Scrub

Willows within the Tehachapi area are widely scattered along drainage channels. Fremont Cottonwood, Arroyo or Red Willow, Salix spp., and wild Elderberry form the woody plant component, along with such understory shrubs as goldenbush and curly dock. Soil in this vegetation area is unique, because fine gravelly alluvial deposits near drainage areas may be constantly disturbed, and the resulting verticils are self churning in runoff areas. Such areas were extensive in California, but have been reduced by urban expansion and flood control site modifications in recent years. The southwest portion of the City, which formerly formed willow-cottonwood scrub vegetation, is currently under construction as a flood control area.

Riparian vegetation, such as the southern willow scrub, is associated with permanent and intermittent surface water. Recent

drought conditions have reduced the means of identifying riparian habitat. In some areas trees may be the only indicators. Typical riparian indicator trees are sycamores, willows, cottonwoods, and alders. Streams in the Tehachapi area, such as Tehachapi Creek, Antelope Creek, Mendiburo Creek and Blackburn Creek, have scattered riparian growth. A buffer zone of 100 feet on each side of these riparian systems would serve to conserve the semi-aquatic ecosystem.

F. WILDLIFE

Although fish and wildlife are renewable resources, the rates of renewal are usually very slow, and are often impeded by such disruptive forces as urbanization, human harassment, predator control and pollution. Important fish and wildlife habitats are located on the map entitled, "Ecological Habitats."

The varied habitats and topography of the Greater Tehachapi Area provides permanent and transitory range to several hundred species of vertebrates. The population of many of these species is below optimum desired levels, due primarily to low quality habitat and lack of vegetation management.

1. Area Game Species

Various types of natural vegetation provide habitat for the wildlife species in the City of Tehachapi. Three big game species are found in the Greater Tehachapi Area - California mule deer, mountain lion and black bear. Mule deer range throughout the area, utilizing the higher regions in warm seasons and the valley during winter when the mountains are snow-covered. Sheltered and isolated valleys serve as fawning areas in the spring. Their main home range extends upward from about the 3,750-foot elevation.

There are seven major species of upland game which occur primarily in the mountain areas: quail, rabbits, tree squirrels, band-tailed pigeons, dove, turkey and chukar. There are no reliable population estimates of any of these upland game species, due to the scarcity of adequate field data.

2. Nearby Forest Species

The vast majority of wildlife species in the Alpine Forest Area southwest of the City and the Sequoia National Forest (just north of the Greater Tehachapi Area) falls within the nongame category. Because of the vast number of species and respective types of habitat needs, and due to relatively low public interest or support for these nongame species, they have generally not been addressed in past wildlife management projects, except for those designated for sensitive, threatened or endangered species. This situation has prevented adequate nongame management so that many of these species are, perhaps, at low population levels.

3. Fisheries

Fresh water habitats include Brite Lake, Stallion Springs and Bear Valley Springs Lakes, all of which have populations of Rainbow trout which are supplemented by the State Department of Fish and Game plantings, working in cooperation with local sportsman associations and community facilities districts. Lake Isabella and the Kern River are to the north of and outside the Greater Tehachapi Region, but certainly deserve mention as significant fresh water habitats.

4. Species Diminishing from the Area

The California Grizzly Bear, though now extinct, was once a common site roaming throughout the Sierra Nevada and Tehachapi traverse ranges. Many species have now vanished from the local area, including the California condor, San Joaquin kit fox, tule elk, peregrine falcon and pronghorn antelope. However, efforts have recently been made to reintroduce the tule elk and pronghorn antelope into an area in the Greater Tehachapi region. Other species once abundant in the area, such as the Swainson's hawk, black shouldered kite, ring-tailed cat, golden eagle, southern rubber boa, southern spotted owl, Tehachapi pocket mouse and the Tehachapi slender salamander, have been listed as threatened and/or protected by the California Fish and Game Commission. Still others, including the badger, California black legless lizard, Cooper's hawk and six other bird species are considered sensitive and, possibly, rare to the City.

Although owls and eagles were once prevalent along the riparian green belts of the Tehachapi area, their populations have been greatly diminished due to human intrusion and modifications of these habitats. Two animal habitats which are of importance to these populations are the hillside areas surrounding the Tehachapi Valley and the eucalyptus and other tall windrows throughout the area.

5. Management of Biological Resources

Various governmental agencies provide for the protection and preservation of Kern County's plant and animal communities. The State Department of Agriculture has the power to regulate and control the use of fertilizers, herbicides and pesticides. The County Agricultural Commissioner, governed by the State Agricultural Code, is responsible for the protection of the public from harmful plant diseases and pests.

Both the Department of Forestry and Kern County Fire Department (through the California Vegetation Management Program) are conducting prescribed burns, primarily in the chaparral. Mosaic blocks of perhaps 2,000 to 4,000 acres will be burned every 20 to 30 years.

Local agencies, such as the City of Tehachapi Planning Department and the Department of Public Works, can aid tremendously in exercising land use controls in sensitive and scenic areas. The Conservation Element, combined with the other General Plan Update Elements, strive to achieve this control.

Among the agencies which help protect and preserve fish and wildlife are the U.S. Department of the Interior and the State Department of Fish and Game. Within the Department of Interior, the U.S. Forest Service is responsible for the preservation of wildlife habitats within the Sequoia National Forest. The Forest Service plans to reintroduce a number of wildlife species into the forest and surrounding areas. Peregrine falcons will be introduced over time as animals and funds are available. The Department of Fish and Game released thirty rocky mountain elk in the mountains west of the City during the early 1980's. Various signs of elk habitation (tracks, scat, etc.) have been noted by residents of the region as recently as 1990.

Wild turkey species have been reintroduced to the Greater Tehachapi Area. Currently, the largest known wild turkey flock in the Tehachapi Mountains consists of approximately 350 to 500 birds and is located near Caliente.

Six pronghorn antelope were released onto private property to the southeast of the City of Tehachapi. Being wide range foraging animals, these have not been seen within or around the City, although they have recently been sighted approximately ten miles west of the City at the San Joaquin Valley base of the Tehachapi Mountains.

G. SCENIC VIEWSHEDS

The visual and aesthetic beauty of the natural landscapes in the City of Tehachapi is perhaps one of its most significant values. The visual resources are largely comprised of the varied topography, exposed geological formations and heterogeneous vegetation. Visual quality is a combination of the variety in the physical features of the land and the sensitivity of people to that landscape. The scene is perceived as (1)

foreground, with attention to detail, at less than one-half mile; (2) middleground, with much less detail but attention to vegetation changes from one-half mile to 3 - 5 miles; and (3) background, with no detail and attention to large land forms at distances greater than 3 - 5 miles away. Conservation of visual quality is usually directed at activities and characteristics in the foreground zone.

The scenic resources of Tehachapi are of considerable value in providing a pleasurable environment for both local citizens and area residents. State Highway 58, which runs east/west near the Central Business District, has been designated as a State Scenic Highway. Kern County has proposed the designation of two Scenic Highways near the City of Tehachapi: the Tehachapi-Willow Springs Road which runs north/south along the eastern portion of the City; and Rosamond Boulevard, which runs east/west along the southern end of the Tehachapi Mountains. An extension of the Pacific Crest Hiking Trail is proposed along the eastern and southern edge of the City.

1. Statutory Requirements

This section describes the provisions of the State Scenic Highway Law for the regulation of land use and activities within the viewshed of a State Scenic Highway.

Government Code Sections 65560(b)(3) and 65561(a) address the preservation of scenic viewsheds as follows:

"Open-space land" is any parcel or area of land or water, which is essentially unimproved and devoted to an open-space use as defined... (below):

Open space for outdoor recreation, including but not limited to, areas of outstanding scenic, historic, and cultural value...including...areas which serve as links between major recreation and open-space reservations, including utility easements, banks of rivers and streams, trails, and scenic highway corridors.

The preservation of open-space land, as defined in this article, is necessary not only for the maintenance of the economy of the state, but also for the assurance of the continued availability of land for the production of food and fiber, for the enjoyment of scenic beauty, for recreation and for the use of natural resources.

Scenic highways and open space play a mutually supportive role. Devoting a scenic corridor to open space is a useful way of

preserving the scenic values presently associated with various highways. Conversely, these travelways and their attendant open space corridors form linkages between larger open space areas, thereby contributing to a more coherent overall open space system. Scenic resources are further addressed in the Open Space Element.

H. CULTURAL RESOURCES

In the broadest sense, cultural resources refer to the varied components of a cultural system which confer unique character, and which together contribute to its integrity and persistence. Cultural resources include all those resources and circumstances necessary for the maintenance of an integrated, distinct way of life.

Cultural resources can be regarded as symbols of a people and their civilization. These symbols can represent human activity in prehistory as well as the present. Cultural resources can provide a sense of place, a history, and a sense of pride for residents of a region.

The term cultural resource is most frequently identified with material items. These include prehistoric and historic districts, sites, structures, and other evidence of human use considered being of importance to a culture, subculture, or a community for traditional, religious, scientific and other reasons. These resources may be prehistoric aboriginal Indian sites, historic Native American and Euroamerican areas of occupation and activity, or features of the natural environment.

The federal government has long affirmed the principle that preservation of such resources is an important element in maintaining cultural diversity and in preserving American heritage values on the local, state, and national levels. As a result, laws have been passed that create a National Register of Historic Places and a National Register of Historic Landmarks and institute procedures to protect cultural resources on or eligible for the National Register. It is tangible, material cultural resources that are potentially eligible for the National Register of Historic Places, and these resources are also the principal focus of extensive legislation at the state level.

But other laws protect the less tangible resources. Non-material cultural resources include cognitive systems (including meanings and values attached to items of material culture, biota, and the physical environment), religion and world views, traditional or customary behavior patterns, kinship and social organization, folklore, etc.

1. Archaeological

Archaeology may be generally defined as the study and reconstruction of prehistoric human societies. Archaeological resources refer to the material remains (artifacts, structures, refuse, etc.) produced purposely or accidentally by human beings. The scientific study of these remains can result in the identification of activities, types of adaptation to the environment, and changes in activities and organizations that were experienced by groups of people in the past. Furthermore, these remains often have special significance to Native Americans, ethnic groups, special interest groups (i.e., historians, avocational archaeologists), and the general public.

The Tehachapi area can be characterized as highly sensitive from an archeological resources perspective. The General Plan study area and the surrounding communities comprising what is commonly referred to as the Greater Tehachapi region is the ancestral home of the Kawaiisu cultural group. Prior to having contact with California ethnographers at the turn of the century the Kawaiisu identified themselves as the "Noo-ah". The Kawaiisu are not a federally recognized tribal group/entity. However, there are between 150 and 300 individuals that identify themselves as the descendents of the Kawaiisu and a number of Kawaiisu families reside in the Tehachapi area. Kawaiisu are linguistically related to the Shoshonean language family and the name Tehachapi is derived from the Kawaiisu language although there is debate as the actual meaning of the word or phase. Ethnographical information suggests that the Tehachapi region was periodically exploited by Mojave Desert cultures such as the Southern Sierran Tubatulabal and cultural groups from the Central Valley such as the Valley Yokuts and Inland Chumash. Permanent occupation of the area by the Kawaiisu is placed around 500 AD to 1100 AD.

The Kawaiisu maintained a hunting gathering economy and the Tehachapi area offered numerous edible plants and animals. Kawaiisu lived in small extended family, groups, and bands that were apparently politically independent from one another. These extended family bands worked individually and collectively to obtain the resources they needed for survival. They moved seasonally throughout their territory according to the seasonal conditions and the availability of food resources. Prior archeological studies within the Kawaiisu territory have recorded villages, campsites, pictographs and rock wall features. These include several important sites in the Tehachapi region.

In the General Plan study area, there have been 26 cultural resource studies conducted.

2. Historical

Historical resources refer to the material and non-material expressions of human adaptations which characterized the post-contact or historic period. These resources include historic event or activity sites, historic archaeological sites, standing architecture and other significant properties, and documents and other sources of historical information and objects of material culture; and, secondarily, the more intangible cultural qualities such as folklore, social organization, and value systems which are associated with these properties.

The material and non-material aspects of culture are so closely interwoven that evaluation of historic properties and other material items, especially those currently in use, is incomplete without understanding the values and meaning attached to the material item and the importance of the item or property to the maintenance of a particular aspect of that culture. Because historical studies must necessarily address both historic properties currently in use and abandoned historical sites, it is important to differentiate between resources that are part of living cultural systems and those that are not. Both kinds of historic resources can be considered significant for their inherent historic values. However, in the former case, assessment of the significance of these properties must also consider the values placed on them by the community or cultural groups and the importance of the property or material item in the maintenance of an aspect of that culture.

However, what may be considered historically unimportant today, when compared with future evidence yet to be discovered, may prove to be very important for a correct interpretation of a particular cultural phenomenon. Therefore, care must be taken when deciding whether to preserve one site or artifact versus another, as to how much to excavate and whether to leave the object in situ or to remove it to a competent place of preservation.

The Kern County Cultural Heritage Board and/or the Tehachapi Heritage League shall make recommendations of historical sites for designation as County Historical Landmarks and possible placement on the National Register. There are a total of 60 sites countywide. The Tehachapi Heritage League were instrumental in having the Errea house placed on the National Registrar of Historical Places and they are in the process of also having the Tehachapi Depot located on Tehachapi Boulevard listed.

H. ENERGY RESOURCES

Energy issues impact a wide range of daily activities. This included the more obvious uses of energy for transporting, heating, cooling and lighting. Less obvious but equally important is the energy embodied in the materials and foods consumed by City of Tehachapi residents on a daily basis.

A number of goals and policies in various general plan elements address energy issue both directly and indirectly. The goal of a jobs/housing balance in the Land Use Element will reduce commuter travel, and policies in this element pertaining to windparks will also contribute to energy conservation. Circulation goals and policies will facilitate the smooth flow of traffic, and goals and policies in the Seismic and Safety Element pertaining to hazardous materials will reduce energy used in waste disposal activities.

Policies in this element attempt to conserve energy by reducing the waste and excessive use of natural gas, electricity and water, and by promoting conservation and use of renewable energy sources. This wide-ranging approach to energy use will help to reduce the energy budget of Tehachapi's citizens.

1. Non-Renewable Energy Resources

Energy conservation is important in preserving non-renewable resources to ensure that these resources are available to future generations. There are a number of benefits associated with energy conservation, such as improved air quality, reduction of energy costs, and waste stream reduction.

All traditional non-renewable energy resources consumed by land uses of the City are imported. There are no wells producing oil or natural gas, coal deposits, refineries and processing facilities, or generating stations within the City of Tehachapi. Natural gas is imported by the Southern California Gas Company (SCG) from its interstate system. Electrical energy is accessed by transmission and distribution lines from the Southern California Edison Company substation in Acton, California.

2. Renewable Energy Resources

Alternative or renewable energy sources available to the City include solar and wind energy. Renewable energy sources, in contrast to the traditional energy sources, are not limited in quantity and their supply is not dependent on foreign sources. On

the whole, these energy resources are also less polluting and less energy intensive per unit of power generated.

The valley location and low population density of Tehachapi provides opportunities for the application of solar collection systems in residential, commercial and municipal buildings. Solar collection systems for space heating and water heating, as well as swimming pools require minimal investment and maintenance, and are readily available through qualified, reputable vendors. Systems can be self-installed or contracted for installation. Savings on electricity and natural gas use from solar collection systems vary, depending on the system, type of use, and number of users.

There are numerous windparks located within the Tehachapi Planning Area boundaries. These privately owned facilities include the wind turbines and related offices and warehouses. The local windparks have a generating capacity of 1.4 billion-kilowatt hours, which is enough to meet the electricity demand of a population of 50,000. The power produced from the windparks is purchased by SCE, and along with electricity generated from other sources, is added to the company's grid system and fed through distribution lines to meet the needs of the Tehachapi region. With the advent of energy deregulation, customers can now purchase electrical energy directly from companies such as Enron, although these alternative sources still use the established distribution system.

III. STATEMENT OF GOALS AND OBJECTIVES

The following sections present the goals, objectives and policies regarding conservation for the City of Tehachapi:

Goals

1. Develop and maintain a series of land conservation policies, including standards and criteria which can serve as guides to planning efforts.
2. Fulfill the responsibilities of each generation as trustee of natural resources for succeeding generations.
3. Assure for all citizens safe, healthful, productive, and aesthetically and culturally pleasing surroundings.
4. Attain the widest range of beneficial uses of the natural resources without degradation, risk to health or safety, or other undesirable and unintended consequences.
5. Preserve important historical, cultural, and natural aspects of the natural heritage and maintain, wherever possible, an environment which supports diversity and variety of individual choice.
6. Achieve a balance between population and natural resource use which will permit high standards of living and a wide sharing of life's amenities.
7. Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.
8. Conduct an adequate conservation program to insure a supply and quality of water to meet the present and future needs.
9. Obtain maximum benefit for limited water resources and utilizes only safe yields from groundwater basins.
10. Continue to implement a program that minimizes the danger caused by hydraulic forces of surface water.
11. Express interest in the forestland and work with the various agencies for the conservation and development of this resource, and support the replanting of forests for their future multiple use benefits.

12. Develop land uses that are compatible with the capability of the soil to the extent possible and to discourage the improper use or waste of soil by inappropriate use or erosion and to prudently utilize the inherent capabilities of all soil groups to serve both short- and long-term interest.
13. Assure that land uses near river and water resource areas enhance the public interest and that an adequate supply and quality of river and other water exists to meet present and future needs of the population.
14. Encourage state researches to find new ways to provide and manage fisheries and to develop new techniques for establishing recreational fishing areas.
15. Promote the protection of archeological resources, the documentation of archeological sites and the expansion of the database.
16. Promote the survival of indigenous wildlife specie, and reduce the loss of key wildlife habitat to uses which are detrimental to wildlife types.
17. Properly utilizes wildlife resources for recreational benefits.
18. Judiciously utilizes the natural resources for the benefit of the people of Tehachapi without detriment to the environment and insures efficient use of the natural resources.
19. Efficiently utilizes all available minerals and mineral resources found in this area without unnecessary damage to the environment.
20. Preserve natural areas having unique and/or endangered plant types or plant communities.
21. Promote conservation, development and utilization of natural resources, which includes flora, fauna, wildlife and other natural resources in the City of Tehachapi.
22. Promote the orderly management of the City's natural resources to prevent their waste, destruction and neglect.

Objective 1: Maintain existing significant vegetation on present and future public and private properties throughout the City.

Policies

- a. Retain and maintain the quality and health of existing landscape in the public open spaces (sidewalks, alleys, parks, civic and cultural facilities, and schools) and replace vegetation, which is unhealthy or dead, ensuring that such actions are in accordance with the Open Space/Recreation Element policies.
- b. Encourage property owners to maintain existing vegetation on developed sites and replace unhealthy or dead landscape.
- c. Encourage developers to incorporate mature and specimen trees and other significant vegetation, which may exist on a site into the design of a development project for that site.
- d. Require that new development incorporate adequate landscape in accordance with land use amenity policies.
- e. Encourage the use of fruit bearing trees and vegetable gardens in private development projects.

Objective 2: Improve landscape quality of the City's public open spaces.

Policies

- a. Encourage types and patterns of development, which will minimize destruction of, or damage to, significant biotic resources within the planning area.
- b. Encourage the planting of trees and other vegetation, especially native species, to enhance the environment.
- c. Provide for landscape improvements of the City's sidewalks, streets, civic facilities, and other public spaces in accordance with the Open Space/Recreation Element policies.
- d. Provide for landscape improvements of the City's parks in accordance with the Open Space/Recreation Element landscape policies.

Objective 3: Identify and encourage the preservation of significant architectural, historical, and cultural resources.

Policies

- a. Require new development applications proposed over relatively undisturbed property to conduct archeological surveys in conjunction with the environmental review and development review process.
- b. Compile and maintain a current inventory of architectural, cultural, and historic resources within Tehachapi.
- c. Consider the potential establishment of special zones characterized by the presence of significant architectural, historical, and cultural commercial and residential resources which would provide (a) guidelines for rehabilitation and new construction, (b) demolition control, and (c) use regulation.
- d. Require that significant architectural, historic, and cultural buildings be renovated according to the following guidelines:
 1. A compatible use is located in the structure which requires the minimum alteration to the historical character of the structure and its environment;
 2. Rehabilitation should not destroy the distinguishing feature or character of the property and its environment and removal or alteration of historical architectural features should be minimized;
 3. Renovations should recognize buildings as products of their own time, discouraging alterations to create an appearance that is contrived and inconsistent with the actual character of the buildings;
 4. The existing character of building/house spaces and setbacks should be maintained; and
 5. The existing height, bulk and massing which serves as an important characteristic of the resource should be retained.
- d. Require that new construction in any designated architectural/historical/cultural district complement the existing structures and open space characteristics.
- e. Recognize, document and protect historic districts with stylistic or thematic groupings of significance.

- f. Encourage the adaptive reuse of buildings and structures of significant historical or cultural value.
- g. Construction activity will be conducted in a manner presented in Section VIII of Appendix K of the CEQA Guidelines, which describes procedures to employ in the event of discovery or recognition of any human remains in the project area.

Objective 4: Encourage and provide incentives to achieve long-term preservation of significant architectural, historical, and cultural buildings and neighborhoods.

Policies

- a. Consider the establishment of a program of low-interest rehabilitation loans for the maintenance and upkeep of significant architectural, historical, and cultural buildings.
- b. Consider the relaxation of current building and zoning codes, to the extent allowable by the UBC to preserve significant structures, while insuring that basic health and safety goals are met.
- c. Encourage property owners to submit applications to qualify appropriate properties and buildings on the National Register of Historic Places and/or the State Landmark program.
- d. Support any tax incentive, Redevelopment Agency Formation, mutual covenants, protective covenants, purchase options, preservation easements, building, fire, and City code modifications and any other methods deemed mutually agreeable between City and landowner which will help to preserve historic resources.
- e. Consider the adaptive reuse of significant architectural and historical residences for a use other than residential, provided that such use is compatible with the neighborhood in which it is located, on approval of the Planning Commission.

Objective 5: Provide for the retention and adaptive reuse of buildings of architectural, historical, and/or cultural significance.

Policies

- a. Require that existing commercial and residential buildings exhibiting significant architectural styles not be demolished without adequate study of the feasibility of their preservation and

demonstration that financing for the replacement use has been secured and all other approvals have been obtained.

- b. Encourage developers of sites containing a significant architectural, historical, or cultural structure to adaptively reuse and expand it, in lieu of demolition and replacement, where financially feasible.
- c. Encourage developers to incorporate in new construction the building facade or other important architectural details of a significant existing structure when that structure must be replaced.
- d. Investigate the feasibility of relocating a significant structure to another site when it must be replaced at its current site.
- e. Make available for purchase by owner's plaques to identify all structures, sites, and features of architectural, historical, or cultural significance and encourage owners to display their plaques for public information.

Objective 6: Encourage the conservation and protection of natural resources within the City of Tehachapi.

Policies

- a. Cooperate with federal, state and county governments and local agencies concerning the maintenance and improvement of the quality and quantity of local and regional groundwater resources.
- b. Reduce per capita water consumption by requiring the use of drought tolerant landscapes in new developments and encourage the replacement of existing non-native and water consumptive landscapes.
- c. Study the feasibility of using reclaimed water for irrigation in parks, golf courses, recreation areas, industrial uses, etc.
- d. Consider the establishment of a rebate program for the replacement of aging, leaking, and/or inefficient plumbing with more efficient, water-saving plumbing.
- e. Educate the public regarding the need for energy conservation, techniques that can be employed, and systems, which are available.
- f. Establish a community-recycling program to encourage the reuse of newspapers, cans, bottles and other recyclable materials.

- g. Cooperate with adjacent community service districts to consider undertaking and operating solid waste recycling programs.
- h. Evaluate the feasibility of the channelization of unutilized water from areas in the City with high water tables to irrigate public property as well as for the other public-oriented uses.
- i. Examine the feasibility of participating in a regional wastewater-recycling program.
- j. Work with other cities and the League of California Cities to develop a strong statewide water conservation policy, which involves agricultural as well as urban uses.
- k. Encourage the incorporation of water and energy conservation features in the design of all new construction and site development and the installation of conservation devices in existing developments; including but not limited to thermal insulation, water-tight plumbing, low-flow irrigation and plumbing fixtures, sealed gas lines, double pane glass and other similar techniques.
- l. Encourage energy audits of existing structures, identifying levels of existing energy uses and potential conservation measures.
- m. Provide incentives for the installation of energy conservation measures in existing buildings characterized by a high level of energy consumption, including technical assistance and possible low-interest loans.
- n. Projects which meet the City of Tehachapi's Thresholds of Significance for biological resources or are known to possess listed plant and animal species will be required to have a biological investigation if such species may be present. Federal and state protocols and requirements shall be used for such surveys and needed mitigation.
- o. Regulate the type and design of new projects that may eliminate natural (permeable) surface and interfere with ground water recharge, open areas or landscaping coverage as prescribed.

Objective 7: Formulate, establish and conform to a citywide energy management plan which sets specific energy use goals for Tehachapi.

Policies

- a. Establish land-use patterns that promote energy efficiency. Include such diverse factors as cluster housing, street orientation, and the location of commercial and industrial land.
- b. Encourage development proposals which allow easy access to future public transit systems, and encourage clustering of high density residential, commercial, service and other users into multi-use centers to reduce transportation. These centers shall be adjacent to future public transportation terminals and routes.
- c. Develop and promote energy efficient transportation systems, including various forms of mass transit, dial-a-bus, rail systems, dedicated roadways, conventional buses, etc., as well as less conventional transportation means such as walking, biking, mopeds, and others.
- d. Encourage increased vehicle occupancy and car pooling, provide attractive walkways, bike paths, improve attractive walkways at systems, and provide new systems to increase energy efficiency of freight and passenger movement.
- e. Establish efficiency standards for new residential and commercial buildings. The standards shall address such items as site design (building orientation), insulation, fenestration, shading, solar rights, landscaping, solar heating and cooling, HVAC (heating, ventilation and air conditioning) equipment, HVAC systems, economizer cycles, heat recovery, energy storage capability, appliance efficiency and lighting efficiency.
- f. Require that sites be designed to allow optimum orientation and configuration to minimize energy consumption.

Objective 8: Promote and encourage energy efficiency and the use of renewable energy resources.

Policies

- a. Explore alternate energy sources. This includes a detailed study of recycling the waste material from the entire City to retrieve the valuable components and burn the rest for steam or electricity production. Other sources to be considered are geothermal, wind, wave, tidal, solar, wood and other more exotic sources.

- b. Encourage the use of alternate energy sources, including those above, in industrial, commercial and residential developments.
- c. Promote solar assisted heating and cooling systems in all new or multiple unit residential, commercial, and industrial buildings.
- d. Encourage the use of passive design concepts, which make use of the natural climate to increase energy efficiency.
- e. Require new development to utilize design techniques which conserve energy.
- f. Evaluate the feasibility of using solar collectors on public buildings and providing incentives to landlords and developers to install solar collectors within prescribed height limitations.
- g. Encourage new residential, commercial and industrial buildings to have the structural and design capability to incorporate passive and active solar collection systems with clear and optimum exposure to the sun.
- h. Require that new construction not preclude the use of solar energy systems by uses and buildings on adjacent properties.
- i. Consider and encourage the formulation of an ordinance to guarantee maximum solar access for all uses in the City.
- j. Encourage the establishment of methanol production through the utilization and development of existing and future landfill sites, within Kern County.

Scenic:

1. Preserve the rights of the people to the enjoyment of the environment by assuring public access to open space and recreational facilities.
2. Maintain areas of natural beauty and make them available for enjoyment by the people.

Biological:

1. Propagate and protect fish and game by maintaining and improving wildlife habitats.
2. Acquire and improve land and water areas for conservation purposes.
3. Watershed management of which the forests are an integral part indirectly affects the water supply of the City. The City will also support and assist the various agencies which have jurisdiction over the forestland to conserve and develop the forestlands for the benefit and enjoyment of the citizens.
4. Encourage the state to take all possible measures to protect and improve the management of fisheries.
5. Expand pollution control efforts to improve water quality for fish.
6. The preservation of all species of animals is deemed essential to the citizens of the City. Public and private owners of wildlife habitat are encouraged to operate these areas in a manner that reflects good management principles and conserves the wildlife habitat.
7. Within the sphere of interest of the City, the Planning Commission in the decision-making process will review the effect of land use projects on wildlife habitat. Land uses known to be detrimental to wildlife habitats will be guided, if feasible, to other areas where such use would not be detrimental to wildlife.
8. Land use activities in important wildlife habitat areas should be restricted to that which is tolerable by the wildlife inhabitants.
9. The aesthetic nature of the landscape is to be preserved. Mining and mineral processing operations should not be detrimental to the

use capability of surrounding properties because of noise, odor, and dust, vibration, or related hazards and inconveniences.

10. Areas containing unique plant life should be restricted or human use activities minimized so uses will not be detrimental to plant types.

Water:

1. Continue to minimize the areas in which water hazards presently exist in order to protect the lives and property of citizens. Areas identified as being adversely affected by flooding should be zoned in a manner that provides the degree of safety compatible with the degree of risk.
2. Promulgate specific policies regarding water conservation and quality which includes:
 - a. Prevention of discharge of wastewater in a manner that permits it to contaminate water.
 - b. Disposal of solid waste in a manner that prevents the contamination of water.
3. Analyze and evaluate all proposals for wastewater systems in terms of the cause and effect relationship of those proposals on the natural resource elements of the total environment.
4. Base priority for utilization of water on all factors associated with both the source and the contemplated uses of the water.
5. Provide for storm water discharge in a manner that protects development from the hydraulic forces of storm water.
6. Develop and cause to be maintained a comprehensive, area-wide water management program which utilizes water from lakes and streams and recognizes recreational and aesthetic considerations.
7. Watersheds should be protected to the extent feasible from development which would have adverse effects on them and reduce the effectiveness of water retention and release.
8. Multiple use of water resources such as recreational use or waterfowl habitat use should be promoted in conjunction with groundwater recharge areas and wastewater facilities.

9. Water contamination should be avoided by requiring suitable lot sizes in developments not providing sewage treatment facilities.

Soil:

1. Implement a management program to prevent the erosion of soils, sand, and minerals.
2. The City will identify, using the best available technology, areas of unstable soil. Steep and erosive soils will be protected from unnecessary development.
3. Development in all areas will be governed by the capability of the soil to sustain such development.
4. Intensive agricultural land conservation programs will be restricted to lands having soils capable of supporting intensive agricultural activities which are economically feasible.
5. Suitable soil conservation measures in all areas of Kern County will be encouraged.
6. Mineral processing operations should be located close to the material sources.
7. Large-scale displacement of earth should be avoided whenever alternate economic methods of extraction are available.
8. Mining shall not have an adverse effect upon water sources and watersheds.
9. Consideration shall be given to protect wildlife and livestock from the dangers of mining and petroleum product extraction.
10. Identified mineral lands should be regulated to uses which will not restrict or deter potential mineral production.
11. Where feasible, rehabilitation of the natural landscape after mineral production and extraction has ceased should be required.

IV. IMPLEMENTATION PROGRAMS

It is recommended that the City establishes and maintains a register of significant historical, architectural, and cultural resources and adopts an ordinance, which facilitates their protection and preservation. This should be designed to incorporate the pertinent elements of the California Office of Historic Preservation's Handbook for Local Communities (December 1986, prepared by Les Thomas Associates). It is recommended that the City establish a water and energy conservation program to protect and enhance these natural resources.

A. CONSERVATION PROGRAMS

B. WILDLIFE ENHANCEMENT PROGRAMS

1. The City shall continue existing landscape maintenance and improvement programs for public rights-of-way, parks, and other City-owned properties. The effectiveness and value of these shall be monitored periodically and revisions implemented to account for any deficiencies and funding availability.
2. The City shall prepare landscape master plans for public open spaces and parks in accordance with Open Space/Recreation Element landscape programs.
3. Incorporate requirements for the use of drought-tolerant and low water using plant species in site landscape.
4. The City shall formulate a list of acceptable landscape for existing uses and new private development projects. This shall consider the types and species of existing landscape in residential neighborhoods and commercial districts which have demonstrated their ability to be adequately maintained and flourish in Tehachapi's environment and use of species which are smog- and drought-tolerant, are low-water using and require low maintenance and no pesticides.
5. The City shall require that a survey of on-site vegetation be conducted for all projects subject to development review procedures to identify existing mature and specimen trees and other significant vegetation. A qualified botanist or landscape architect should conduct this survey. Where such landscape is identified, City staff shall work with the developer to determine the means by which such landscape may be integrated with the proposed project and preserved. Variance from the site development standards may be considered to preserve the

vegetation, if any adverse impacts of such a variance can be mitigated.

7. Code enforcement programs of the City shall be continued which require that property owners trim overgrown and remove dead vegetation which may constitute health and safety risks.
8. Information shall be provided by the City to developers, property owners, and tenants regarding landscape planning and maintenance, presentations, public seminars and workshops shall provide information.

C. WATER- AND ENERGY-SAVING PROGRAMS

1. Incorporate requirements into the City's Zoning Ordinance for new uses which consume very high levels of energy to be evaluated according to the means by which these levels can be reduced and, if not possible, according to their benefit to the City as an appropriate use (including public review).
2. Implement plans and further evaluates the feasibility of storing, distribution and using reclaimed wastewater from the City's treatment plant for agriculture and landscape irrigation or other purposes.
3. Cooperate with Southern California Edison, the Southern California Gas Company, and local water purveyors to initiate and facilitate programs for energy and water audits of existing structures. These should define the current levels of use, compare these to current standards for similar types of structures, and prescribe corrective methods to improve conservation. The City should initiate programs which facilitate the retrofitting of existing buildings and required improvements. These may include technical assistance and low-interest loans to property owners.
4. Evaluate the feasibility of implementing rebate programs for property owners whom upgrade defective plumbing.
5. Participate with other cities and the State of California in programs to develop statewide water conservation policies which involve agricultural and urban uses. City codes and ordinances should be periodically renewed and revised, as necessary, to reflect such policy and available "state-of-the-art" conservation technologies.
6. Solicit state and federal funds to implement the City's energy and water conservation programs as such revenue is available.

7. Conduct energy audits on all City buildings and incorporate measures to increase their energy efficiency.
8. Incorporate, at a minimum, the following requirements in the City's Building Code:
 - a. State requirements for the use of energy-efficient fixtures and energy saving design elements in new construction (Government Code Section 66473.1);
 - b. Inclusion of operable windows in all new construction, unless sealing is required for safety or other purposes considered acceptable by the City;
 - c. Installation of specified energy conservation elements on transfer or ownership of an existing building.

D. ALTERNATIVE ENERGY SOURCES AND USE PROGRAMS

1. Conduct a study to determine the appropriateness and feasibility of incorporating within the zoning ordinance or as separate ordinance standards to ensure solar access for existing and future uses in the City. This should consider the definition of possible solar envelopes, as a function of building height, bulk, and siting/orientation.
2. Allow for the use of alternative energy systems provided that they meet all public safety, health, and welfare requirements and are proven to be reliable. If necessary, back-up systems should be required.
3. Conduct a study of the feasibility of retrofitting existing buildings with solar and other alternative energy systems.
4. Incorporate code guidelines and standards for new development in Tehachapi's Zoning Ordinance, which minimize the impact of shade and shadows on neighboring properties.
5. Implement the programs contained in the City's Source Reduction and Recycling Element and Household Hazardous Waste Element.

SAFETY ELEMENT

Adopted on October 18, 1999

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I. INTRODUCTION

The California State Legislature through requirement of the Safety Element has placed specific responsibilities on local governments for identification and evaluation of hazards and the formation of programs and regulations to reduce risk and protect the community from risk associated with seismic, geologic load and fire hazards. The Safety Element formerly required as a separate element has been incorporated in the Safety Element as now required under California State Law.

A. STATUTORY REQUIREMENTS

California State law [Government Code Section 65302(i)] requires that each city prepares and adopts a Safety Element as follows:

A safety element for the protection of the community from fires and geologic hazards including features necessary for such protection as evacuation routes, peak load water supply requirements, minimum road widths, clearances around structures, and geologic hazard mapping in areas of known geologic hazards.

Seismic safety, formerly a separate element, is now required to be addressed in the Safety Element. The State requirements for seismic safety are as follows:

A seismic safety element consisting of an identification and appraisal of seismic hazards such as susceptibility to surface ruptures from faulting, to ground shaking, to ground failures, or to effects of seismically induced waves such as tsunamis and seiches.

The seismic safety element shall also include an appraisal of mud slides, landslides, and slope stability as necessary geologic hazards that must be considered simultaneously with other hazards such as possible surface ruptures from faulting, ground shaking, ground failure, and seismically induced waves.

The Safety Element aims at reducing death, injuries, damage to property, and the economic and social dislocation resulting from fire, geologic hazards, and other public safety hazards. While, the Seismic Safety Element aims at reducing death, injuries, damage to property, and economic and social dislocation resulting from earthquakes and other hazards. The Seismic Safety Element is primarily a vehicle for identifying hazards that must be considered in planning the location, type, and density of development. It must address each of the relevant seismic and geologic hazards listed in Government Code Section 65302(f) and should address related matters, including structural

hazards, possible inundation from a dam failure, and plans and programs for emergency response.

The requirements for the Safety Element focus primarily on fires in wildland areas adjacent to urban development and on geologic hazards. The Element also addresses other locally relevant safety issues, including urban structural fires, hazardous materials, and defensible space.

As previously indicated, because of the overlap between the two, the Safety and the Seismic Safety Elements have been combined. The policies and proposals of the Safety and Seismic Safety Element are also coordinated with those of the land use and open-space elements.

The City of Tehachapi will submit to the Division of Mines and Geology of the Department of Conservation one copy of the Safety and Seismic Safety Element.

The Safety Element is intended to identify and define programs to protect the community from fire and geologic hazards. As directed by Section 65302.1 of the California State Government Code, it recognizes and defines substantive problem areas of urban fire hazards, brush fire hazards, and geologic hazards.

Urban Fire Hazard - Predominantly characterized by structural fire hazards affecting residential, commercial and industrial activities.

Brush Fire Hazard - The seasonal fire hazards in sparsely developed brush-covered natural and man-made environments; and the potential impacts of resulting flood and erosion problems.

Geologic Hazards - Geologic activity, and seismic events, creating an impact on the safety and welfare of citizens, such as slope instability, general subsidence, differential settling, ground shaking, ground rupture, liquefaction, erosion, and other associated problems.

Specific items included in the study are generally limited to the boundaries of the City except for elements of seismicity which have a much broader effect on the scope of the study, including:

1. A discussion of the general stratigraphy (rock type and age), and the structural geology (earth structure, faults and folds).
2. The classification and location of active and potentially active faults throughout Southern California which may affect the City.

3. An assessment of the major seismic parameters for ground surface and bedrock motion.
4. An evaluation of the potential for ground failure or other seismically induced damage to the ground surface, and
5. A review of historic earthquakes (historic seismicity) for Southern California as they affect Tehachapi.

B. GENERAL LOCATION AND HISTORIC BACKGROUND

Tehachapi is located approximately 36 miles southeast of Bakersfield, California (see Figure 1), north of the Tehachapi Mountains. The City is an urbanized residential, light industrial and agricultural community with some orchard farming and ranching.

Abundant evidence of seismic activity in California is found in the 200 years of records since Gaspar de Portola reported a strong earthquake near the Santa Ana River in Orange County in 1769. Of the thousands of earthquakes felt in California that have occurred during the last 200 years, three (Fort Tejon 1857, Owens Valley 1872, San Francisco 1906) were truly great earthquakes (over 7.75 Richter Magnitude); 13 were major earthquakes (Magnitude 7.0 to 7.7), such as the Loma Prieta-San Francisco 1989, Arvin-Tehachapi, 1952, and El Centro, 1940; and over 60 were moderate shocks (Magnitude 6.0 to 6.9), such as Santa Barbara 1925, Long Beach 1933, San Fernando 1971, and Whittier Narrows 1988. About 200 earthquakes of Magnitude 4.0 to 5.9 occur within the State every 10 years. These quakes are felt locally and have done little to substantial structural damage.

The existence of historic earthquake records are of a relatively short life span when compared to geologic time so that methods for the prediction of seismicity must be based not only on statistical data from historic records, but more importantly, on the extensive geologic evidence of faulting during the past millions of years. These data suggest that California should anticipate a great earthquake approximately every 60 to 100 years, a major quake every 20 years and a moderate quake about every eight to 10 years. However, no regular periodicity has been established by the data and prediction of earthquakes is not yet possible.

The State of California has an area of approximately 156,000 square miles. The Loma Prieta-San Francisco 1989, Magnitude 7.1 quake was felt over 54,000 square miles, the Arvin-Tehachapi 1952, Magnitude 7.7 quake was felt over 160,000 square miles, and the San Francisco 1906, Magnitude 8.3 quake was felt over 375,000 square miles. From this, it can be concluded that no part of the State of California is immune from earthquake damage. Nevertheless, parts of California will experience a lower earthquake risk because of all or a combination of the following: 1) low population, 2) solid bedrock at the ground surface, and 3) long distance from known active faults.

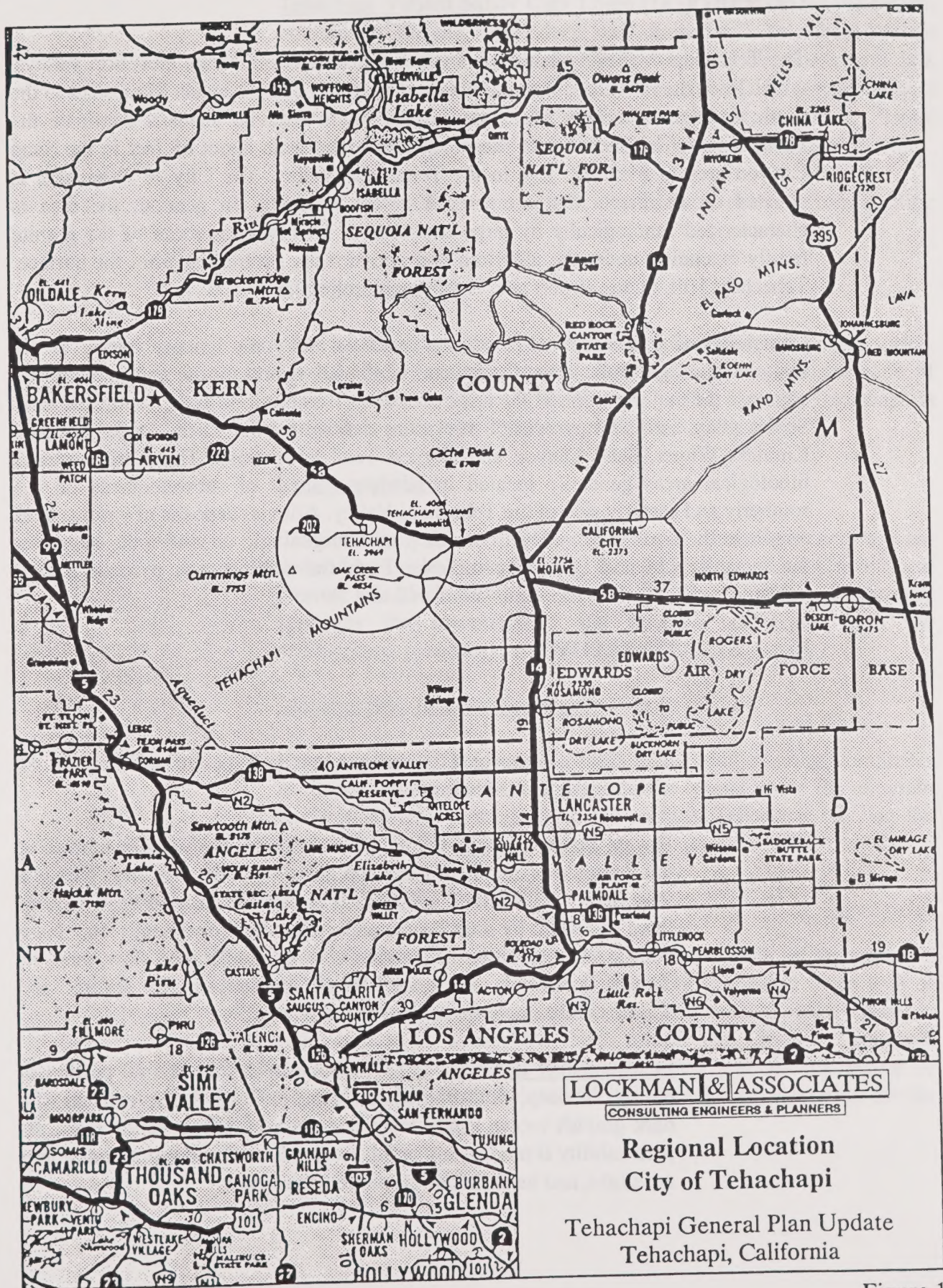


Figure 1

C. GEOLOGY

The Tehachapi Valley system represents a series of intermediate elevation valleys, which lie at the junction of two mountain ranges: the Sierra Nevada Mountains to the north; and the Tehachapi Mountains to the south. Alluvial deposits dominate the valley floors. The thickness of these deposits varies from about 65 feet in the Sand Canyon area to over 200 feet in the Tehachapi Valley. The City of Tehachapi is situated on sediments that are over 400 feet in depth. In general, the area is characterized lithologically by large expanses of acid igneous rocks of the granite family extending under the alluvium and occasionally protruding from the surface. Tehachapi Hill, on the airport site, is one such protrusion.

Complexes of gneiss, schist, limestone, quartzite and some igneous intrusives are scattered throughout the area. Complexes of diorite, quartz diorite and granodiorite compose the major portion of the north side as well as portions in the southwest area. Sedimentary beds and pyroclastic rocks are defined by the Cache Peak, Bopesta, Kinnick, Witnet, Sand Canyon and Horned Toad Formations. These are scattered lithological areas generally located in headwater areas of subwatersheds on the southerly and easterly side of the Tehachapi Valley. Alluvial deposits of various ages dominate the surface of valley floors. A profound geologic unconformity separates the metamorphic and igneous complexes from the sedimentary, pyroclastic and volcanic rocks which overly them (Figures 2 and 3).

1. STRATIGRAPHY

a. Soil

The City of Tehachapi is covered by five types of soil (Figure 4), which are described below.

Havala Sandy Loam (140. 141), characterizes the western portion of the wastewater treatment plant site and the airport property. This is a very deep, well-drained soil. It is a brown and grayish brown sandy loam underlain by dark brown and yellowish brown sandy clay loam subsoil. Permeability of Havala soil is moderately slow, and its erosion hazard is moderate. Septic limitations are severe, and shrink/swell tendencies are low to moderate.

Steuber Sandy Loam (174. 175), characterizes the central portion of the site. A deep, well-drained soil, Steuber Sandy Loam consists of a dark grayish brown sandy loam underlain by brown sandy loam. Its permeability is moderately rapid, erosion hazard and septic limitations are slight, and its shrink/swell properties are low.

Tehachapi Variant Sandy Clay Loam (183), characterizes the eastern boundary of the site, a very deep, well-drained soil. Tehachapi Variant Sandy Clay Loam is a dark grayish brown sandy clay loam with dark grayish brown and brown sandy clay loam subsoil. Its permeability is moderately slow, and its erosion hazard is moderate. Septic limitations are severe and shrink/swell behavior is moderate.

All of these soils were formed in alluvium, derived from granitic rocks.

b. Alluvium Deposits

Alluvial deposits consist of weathered, unconsolidated, poorly sorted, locally crudely stratified gravel, sand, silt, and clay. Distribution of these deposits is depicted in Figure 2. The City of Tehachapi is situated on sediments that are over 400 feet in depth.

c. Sedimentary Beds

Sedimentary beds and pyroclastic rocks of generally tertiary age are defined by Cache Peak, Bopesta, Kinnick, Witnet, Sand Canyon, and Horned Toad Formations. A profound geologic unconformity separates the metamorphic and igneous complexes from the sedimentary, pyroclastic and volcanic rock.

d. Metamorphic. Igneous Complexes

Large expanses of acid igneous rocks of the granite family, complexes of diorite, quartz diorite, and granodiorite extend under the alluvium and occasionally protrude from the surface. Tehachapi Hill, on the airport site, is one such protrusion.

2. FAULTS AND FAULT ZONES

The City of Tehachapi is located between the Garlock Fault on the southeast and White Wolf Fault to the northwest. The City is situated in an area of active orogeny and will experience shaking due to a seismic event. There are no mapped surface or subsurface faults within the City of Tehachapi; therefore, seismic shaking from movement along one of the active or potentially active faults listed below will be the major consideration for the City.

3. ACTIVE FAULTS

Numerous definitions for active faults have been proposed. Probably the most encompassing definition is that of the California Council on Intergovernmental Relations in the General Plan Guidelines, September 1973, which is:

(Active Fault): A fault that has moved in recent geologic time and which is likely to move again in the relatively near future. (For geologic purposes, there are no precise limits to recency of movement or probably future movement that define an 'active fault.' Definitions for planning purposes extend on the order of 10,000 years or more back and 100 years or more forward. The exact time limits for planning purposes are usually defined in relation to contemplated uses and structures).

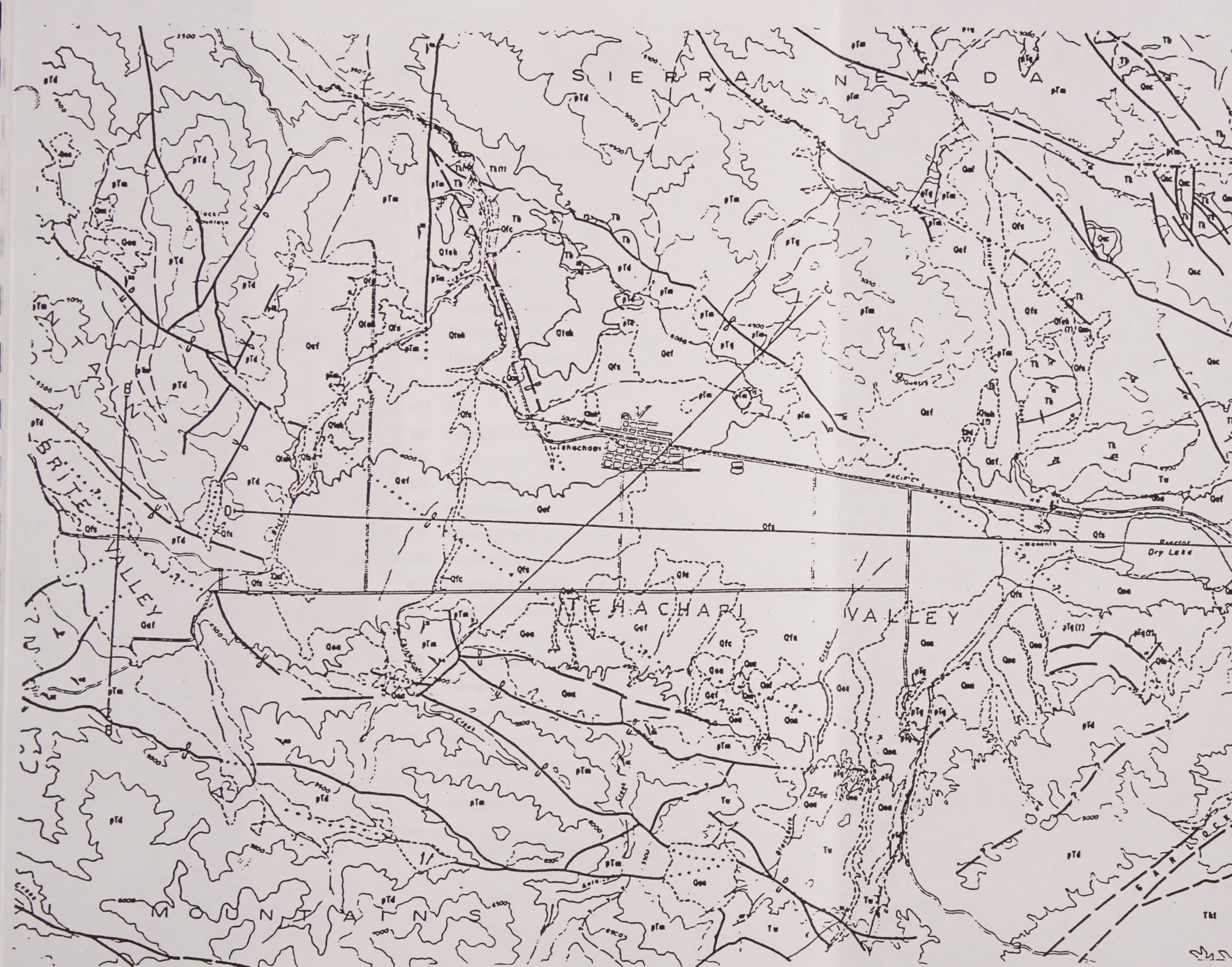
This definition is used in this report for classifying the faults (see Figure 5) described in alphabetical order, as follows:

a. Garlock Fault

The Garlock Fault (6 miles southeast of the City) extends from Frazier Mountains east for more than 150 miles (240 km). It is characterized by left slip displacement that is variously estimated from 6 to 40 miles (9.6-64 km). Recent displacements up to one-half mile (0.8 km) are known. The Garlock shows the characteristic features of high-angle faults with major strike-slip component. The fault zone is narrowly confined through most of its length and is seldom more than a mile (1.6 km) wide.

East from its junction with the San Andreas, the Garlock forms two parallel segments that extend for nearly 20 miles (32 km) until they merge into a single structure. This single unit then extends another 20 miles (32 km) to Red Rock Canyon and the El Paso Mountains.

The Garlock displaces the Sierra Nevada and Basin Range faults and is therefore younger. The Garlock may have been a boundary of the Mojave block as early as the Eocene. It was certainly a boundary of major movement by late Oligocene or early Miocene, because by then the Mojave had developed internal drainage, reversing the previous erosional pattern. Displacement on the Garlock had started by the opening of the Tertiary, with strong vertical components of uplift subsequently changing to dominantly strike-slip movement in middle Tertiary. It is suggested that the Garlock is a transform fault in the plate tectonic history of western North America.



EXPLANATION

QUATERNARY	Qfc	COARSER STREAM DEPOSITS AND RECENT FAN DEPOSITS	Qfs	FINER STREAM DEPOSITS AND FLOOD PLAIN SILTS
	Qaf	ALLUVIAL FAN DEPOSITS	Qos	OLDER ALLUVIUM
PLEISTOCENE	Qan	ANDESITE	Qec	SAND CANYON FORMATION
	Qb	BASALT	Qteh	TEHACHAPI FORMATION
TERTIARY	Qthf	HORNED TOAD FORMATION	Qcp	CACHE PEAK FORMATION
	Tb	BOPESTA FORMATION		
	Tk	KINNICK FORMATION		
	Tw	WITNET FORMATION		
	pTg	GRANITE		
PRE-TERTIARY	pTd	DIORITE, QUARTZ, DIORITE, GRANODIORITE, QUARTZ MONZONITE		
	pTm	GNEISS, SCHIST, LIMESTONE, QUARTZITE, SOME IGNEOUS INTRUSIVES		

MAP LEGEND

- FAULT SHOWING RELATIVE MOVEMENT (Dashed where approximately located, dotted where concealed)
- THRUST FAULT SHOWING DIP DIRECTION OF THRUST PLATE (Dashed where approximately located)
- FORMATION CONTACT (Dashed where approximately located)
- ALLUVIAL CONTACT (Dashed where approximately located)
- ATTITUDE OF BEDDING PLANES
- ATTITUDE OF BEDDING PLANES OR SCHISTOSITY PLANES IN METAMORPHIC ROCKS
- GEOLOGIC SECTION LINE
- TRACE OF SYNCLINAL AXIS
- LANDSLIDE SHOWING DIRECTION OF MOVEMENT

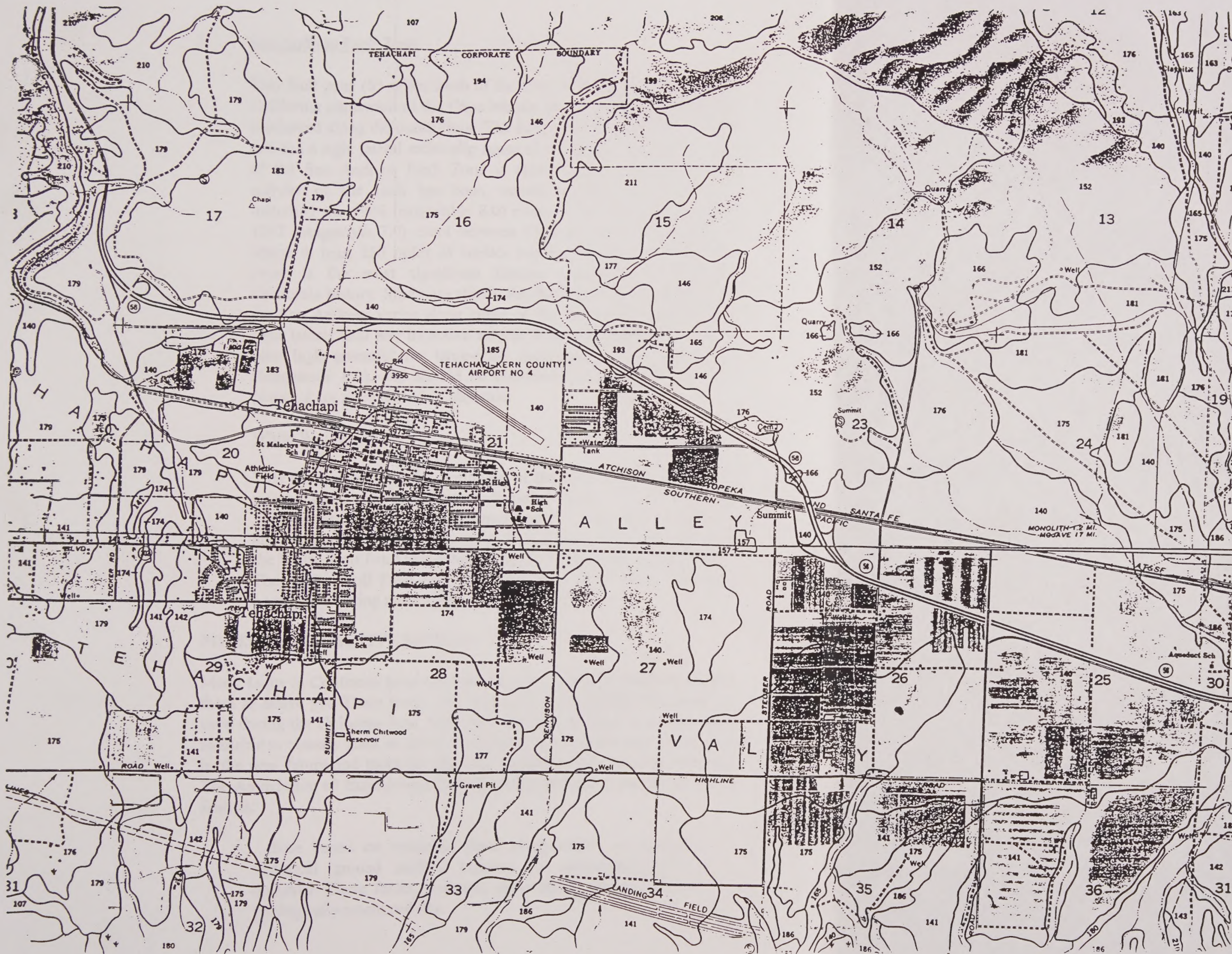
Source: Michael - McCann Assoc.
Engineering Geology

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Geology of the Tehachapi Valley System

Tehachapi General Plan Update
Tehachapi, California

Figure 2



INDEX TO SOIL MAP UNITS

- 107 Arujo-Friant-Tunis complex, 15 to 50 percent slopes
- 108 Arujo-Friant-Tunis complex, 50 to 75 percent slopes
- 132 Edmunston gravelly sandy loam, dry, 30 to 50 percent slopes
- 140 Havala sandy loam, 0 to 2 percent slopes
- 141 Havala sandy loam, 2 to 5 percent slopes
- 142 Havala sandy loam, 5 to 9 percent slopes
- 143 Havala sandy loam, 9 to 15 percent slopes
- 146 Hesperia sandy loam, 5 to 9 percent slopes
- 152 Nacimiento loam, 30 to 50 percent slopes, eroded
- 157 Pits
- 165 Psamments-Xerolls complex, nearly level
- 174 Steuber sandy loam, 0 to 2 percent slopes
- 175 Steuber sandy loam, 2 to 5 percent slopes
- 176 Steuber sandy loam, 5 to 9 percent slopes
- 179 Tehachapi sandy loam, 0 to 2 percent slopes
- 180 Tehachapi loam, 15 to 30 percent slopes, eroded
- 181 Tehachapi cobbly sandy clay loam, 2 to 30 percent slopes
- 183 Tehachapi Variant sandy clay loam, 15 to 50
- 186 Tujunga loamy sand, 2 to 5 percent slopes
- 193 Walong sandy loam, 15 to 30 percent slopes
- 194 Walong sandy loam, 30 to 50 percent slopes
- 199 Walong-Edmundston association, steep
- 210 Xerorthents, loamy, very steep
- 211 Xerorthents-Rock outcrop complex, very steep

Source: USDA Soil Conservation Service

LOCKMAN & ASSOCIATES
CONSULTING ENGINEERS & PLANNERS

Soils of the Tehachapi Valley

Tehachapi General Plan Update
Tehachapi, California

b. San Andreas Fault Zone

This fault zone (63 miles south of the City) extends from the Gulf of California northward to the Cape Mendocino area where it continues northward along the ocean floor. The fault plain is essentially vertical and has a right lateral strike-slip sense of movement. The total length of the San Andreas Fault Zone is approximately 750 miles. The activity of the fault has been recorded during historic events, including the 1906 (magnitude 8.0) event in San Francisco and the 1857 (magnitude 7.9) event between Cholame and San Bernardino where at least 250 miles of surface rupture occurred. This seismic event is the most significant historic earthquake in Southern California history. Study has shown that the character of seismicity of the San Andreas varies along strike of the fault. The length of this right lateral fault and its active seismic history indicates that it has a very high potential for large-scale movement in the near future (Magnitude 8.0), and should be considered important in land use planning for most cities in California.

c. White Wolf Fault

This fault zone (15 miles northwest of the City) is predominantly a reverse fault with subordinate left-lateral offset. The 1952 Arvin-Tehachapi earthquake with magnitudes up to 7.7 occurred on this fault and resulted in displacement of up to four feet. The surface trace of the White Wolf Fault was extended nearly 17 miles by the earthquake. The White Wolf Fault may have originated in Miocene, may have been active during most, if not all of the Pliocene.

4. **POTENTIALLY ACTIVE FAULTS**

Many faults in California have not been mapped in enough detail to classify them as active yet. These faults may have moved during the Pleistocene or even during the Holocene Age. Sufficient concrete evidence is not presently available to classify them as active. Potentially active faults may move again in the near future and therefore must be considered in Land-Use Planning. The Association of Engineering Geologists has defined a potentially active fault as:

...those based on available data, along which no known historical ground surface ruptures or earthquakes have occurred. These faults, however, show strong indications of geologically recent activity.

The above definition is used in this Element for the faults, which are arranged in alphabetical order and listed in Table 1.

Table 2 outlines the geological time scale end events in the Kern County region. Figures 6A and 6B exhibit the Regional Seismic Hazards for the City of Tehachapi, respectively.

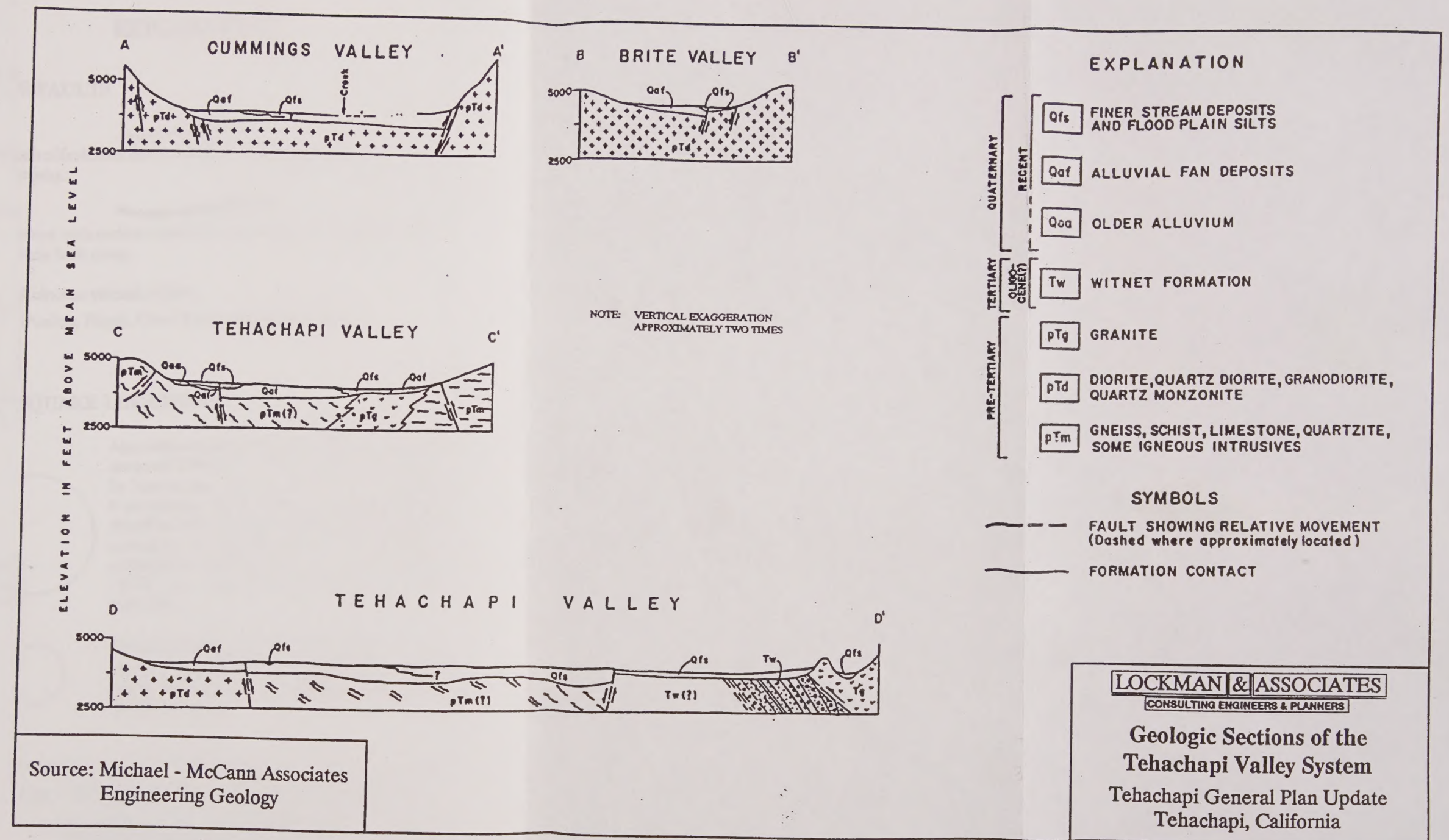


Figure 3



EXPLANATION

ACTIVE FAULTS

.....
Total length of fault zone that breaks Holocene deposits or that has had seismic activity.

—————
Fault segment with surface rupture during an historic earthquake, or with aseismic fault creep.

⚙ Holocene volcanic activity
(Amboy, Pisgah, Cerro Prieto and Salton Buttes)

EARTHQUAKE LOCATIONS

1899 M 7+
Approximate epicentral area of earthquakes that occurred 1769-1933. Magnitudes not recorded by instruments prior to 1906 were estimated from damage reports assigned an Intensity VII (Modified Mercalli scale) or greater; this is roughly equivalent to Richter M 6.0. 31 moderate earthquakes, 7 major and one great earthquake (1857) were reported in the 164-year period 1769-1933.

1952 M 7.7
Earthquake epicenters since 1933, plotted from improved instruments. 29 moderate and three major earthquakes were recorded in the 40-year period 1933-1973.

Source: California Division of Mines and Geology

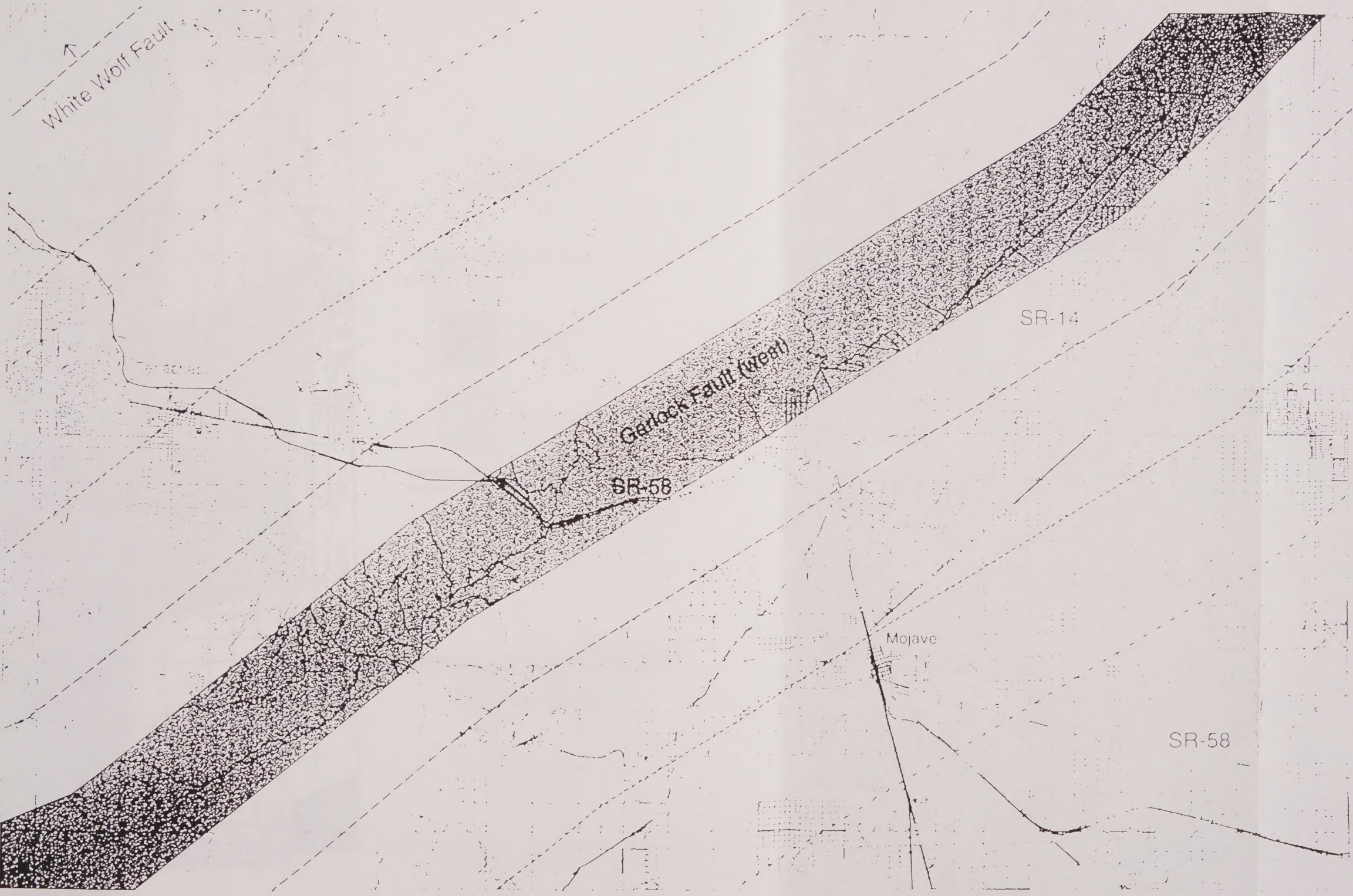
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Major Earthquakes and Recently Active Faults in the Southern California Region

Tehachapi General Plan Update
Tehachapi, California

Figure 5

Active Fault Near-Source Zones



LEGEND

Shaded zones are within 2 km of known seismic sources



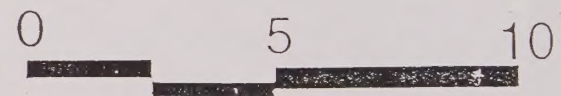
A fault



B fault

Contours of closest horizontal distance to known seismic sources

- 5 km
- 10 km
- 15 km



Kilometers

1/4" is approximately equal to 1 km

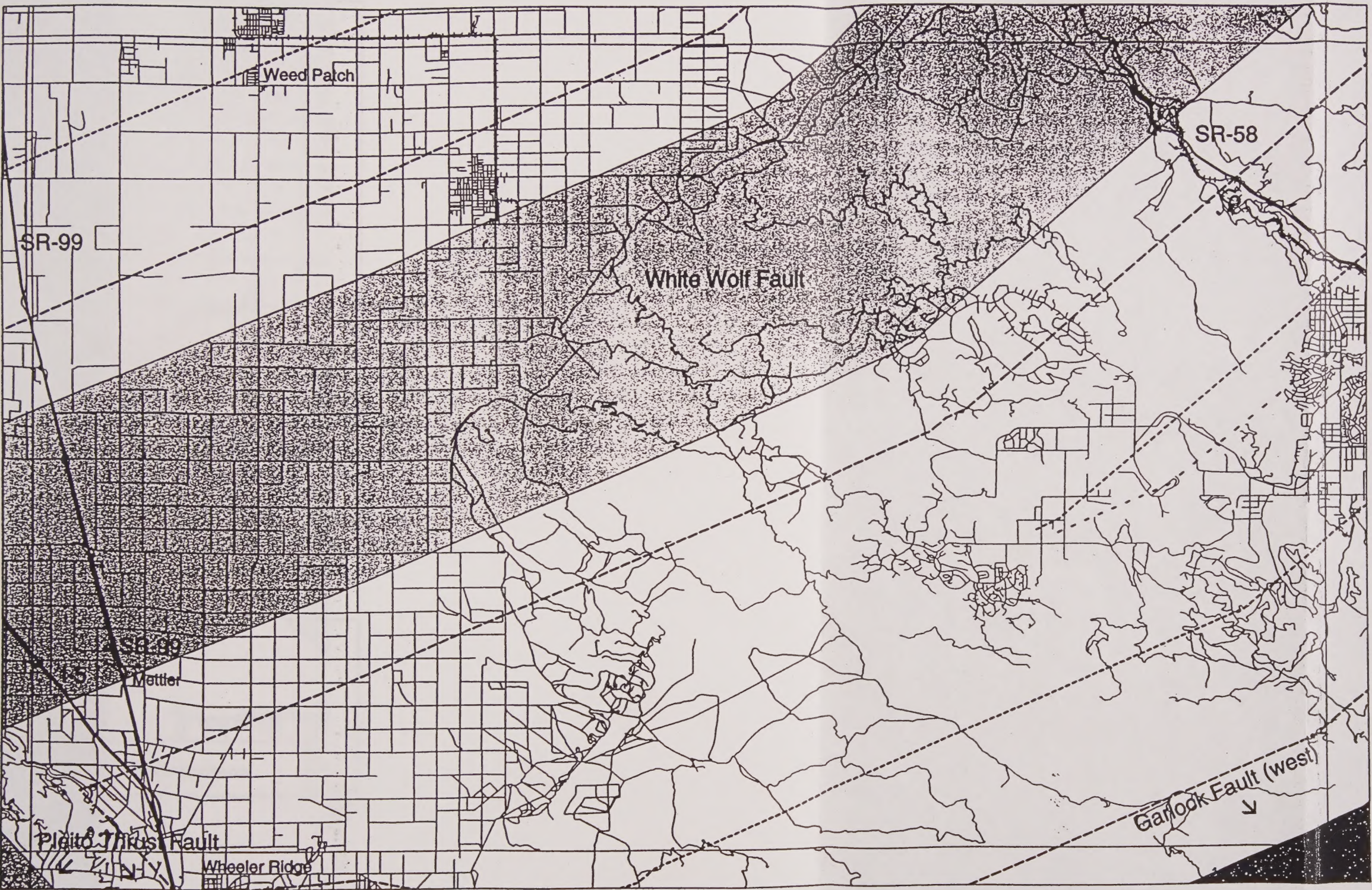
August, 1997

Source: California Department of Conservation
Division of Mines and Geology

Active Faults Tehachapi Region

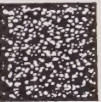
Tehachapi General Plan Update
Tehachapi, California

Active Fault Near-Source Zones



LEGEND

Shaded zones are within 2 km of known seismic sources.



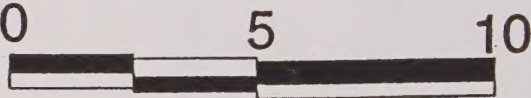
A fault



B fault

Contours of closest horizontal distance to known seismic sources.

- 5 km
- 10 km
- 15 km



Kilometers

1/4" is approximately equal to 1 km

August, 1997

Source: California Department of Conservation
Division of Mines and Geology

Active Faults Tehachapi Region

Tehachapi General Plan Update
Tehachapi, California

Figure 6-B

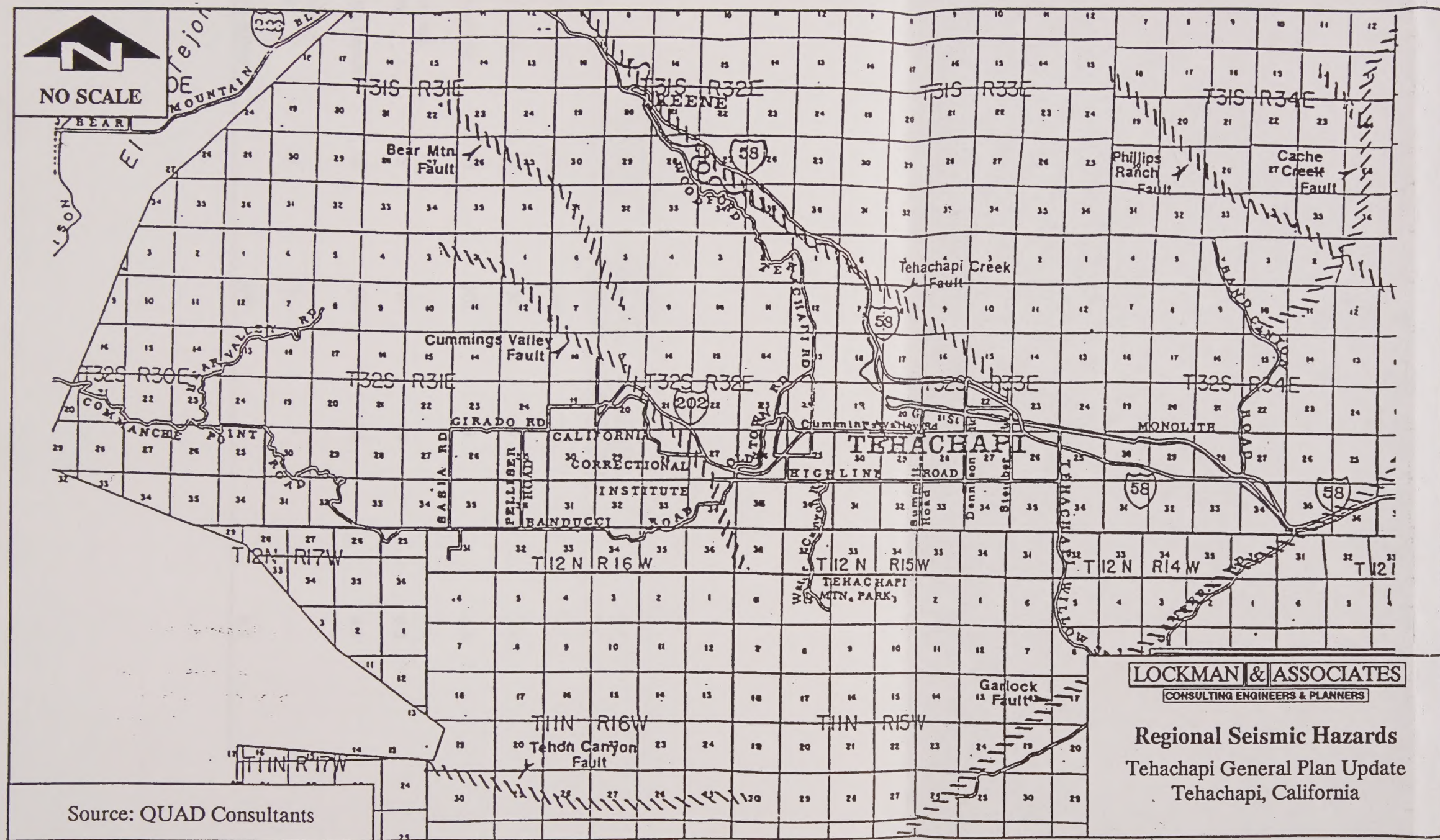


Figure 7

TABLE 1

Potentially Active Faults

Fault	Approximate Distance from City (Miles)	Direction Approximate From City	Approximate Length (Miles)	Expected Magnitude (Richter Scale)
Bear Mountain	9	NW	10	6.5
Breckenridge	20	N	9	6.5
Cache Creek	13	NE	9	6.0
Cummings Valley	5	W	10	6.3
Phillips Ranch	10	NE	10	6.5
Tehachapi Creek	3	N	7	---
Tejon Canyon	7	SW	7	6.0

TABLE 2

Geological Time Scale And Events In The Kern Region

ERA	PERIOD	EPOCH (OR PERIOD)	RADIOMETRIC AGE MILLION YEARS BEFORE PRESENT	STAGE MARINE PORAMINIFERAS	FORMATION MARINE EXCEPT WHEN NOTED (T)	STAGE TERRESTRIAL MAMMALS	FORMATION TERRESTRIAL EXCEPT WHEN NOTED (M)	IGNEOUS & METAMORPHIC ROCKS	OROGENY
	QUATERNARY	HOLOCENE OR RECENT	0.01		ALLUVIUM: RIVER & LAKE DEPOSITS; UNTILTED. (T)		ALLUVIUM - UNTILTED		
		PLEISTOCENE	3.		ALLUVIUM, TILTED (T), TULARE (T)	RANCHOLABREA N IRVINGTONISA 1.5	ALLUVIUM - TILTED MCKITTRICK TAR SEEPS RICARDO	BLACK MT. BASALT	SIERRA LAST UPLIFT COAST RANGE
CENOZOIC	TERTIARY	PLIOCENE	9.	REPETIAN	SAN JOAQUIN ITCHAGUIN- JACALITOS	BLANCAN 4.0	UPPER KERN RIVER	ANDESITE FLOWS BASALT FLOWS TUFFS	SAN EMIGDIO TEHACHAPI
		MIOCENE	12.7	DELMONTIAN MOHNIAN	STA. MARGARITA	HEMPHILLIAN 10	CHANGE HORNED TOAD		
			14.	LUISIAN	MONTEREY	CLARANDONIAN 13	RICARDO-LOWER		SIERRA NEW COVTS.
			15.3	RELIZIAN	TEMBLOR	TEMBLOR			
			22.5	SAUCASIAN		BARSTOVIAN 17 MEMINGFORDIAN 21	UPPER TROPICO BOPESTA KINNICK	SADDLEBACK BASALT	
		OLIGOCENE	26.	ZEMORIAN		ARIKAREAN 26	TECUYS	ILSON ANDESITE	SAN EMIGDIO
			35.	REFUGIAN	WAGON WHEEL TUNEY KRAYENHAGEN	WHITNEYAN CRELLAN CHARDRONIAN*			SEAFLOOR WARPING
		GOCENE	55.	MARIZIAN ULATIZIAN PENUTIAN	PT. OF ROCKS "TEJON" DEMENGINE AVANAI	DUCHESNIAN* HINTON* BRIDGERIAN* WASATCHIAN*			
		PALEOCENE	63.	BULITIAN YNEZIAN	"MEGANOS" LADO "MARTINER" MORENO	CLARCKFORDIAN ? TIFFANIAN? TORRAJONIAN?	FITNET GOLAR	PLUTONS:	GARLOCK FLT 1ST GOVT.?
MESOZOIC	SECONDARY	CRETACEOUS	135.	PANOCHA GRAVELLY FLAT FRANCISAN				CATHEDRAL RANGE HUNTINGTON LK	SAN ANDREAS FLT 1ST MOVT
		JURASSIC	193.	* ? METAMORPHICS				YOSEMITE*	
		TRIASSIC	225.	*				INYO MTNS* LEE VINING*	SIERRA EARLY
PALEOZOIC	PRIMARY	PERMIAN	280.	?			GARLOCK (M)		ANTIER (ANCESTRAL SIERRA)
		PENNSYLVANIAN	320.	?				PAMPA SCHIST? KERVILLE? SERIES	
		MISSISSIPPIAN	345.	?					
		DEVONIAN	395.	*					
		SILURIAN	430.	*					
		ORDOVICIAN	500.	*					
		CAMBRIAN	570.	*					
PRECAMBRIAN		PROTEROZOIC	3,000.	?			?HESQUITE SCHIST RAND-PELONA	JOHANNESBURG? GNEISS & MARBLE	
		ARCHEAN	3,500.		?		SCHIST	RAND SCHIST?	

5. GROUNDWATER

Based on available information the groundwater depth beneath the city is approximately 200 feet below grade, although local and seasonal perched groundwater conditions may exist in the area.

Groundwater elevations may change significantly during a seismic event, either raising or lowering. A rise in groundwater elevations could cause springs or saturation of soils, while a lowering of groundwater could lead to the hydroconsolidation of sediment. Either case could cause numerous problems during or after an earthquake.

D. SEISMICITY

Historically, California has always been seismically active. Few areas in Southern California have not been or will not be affected by strong ground shaking from nearby earthquakes. Recorded earthquakes that have occurred in the area during the last 70 years implicate that the region is seismically active.

1. SEISMIC PARAMETERS OF BEDROCK MOTION

Seismic parameters have been estimated for active (Table 3) faults, which may have a significant effect on the City of Tehachapi within the next 100 years. The most characteristic earthquake parameters which have been estimated based on a given Richter magnitude are: 1) epicentral distance, 2) hypocentral distance, 3) peak acceleration, 4) duration of shaking on soil site, 5) duration of shaking on rock site, and 6) predominant period of motion.

These parameters are derived from statistical rupture length-magnitude and acceleration-magnitude relationships of historic earthquakes. The resulting attenuation curves are then used to estimate the average bedrock accelerations and the predominate period of the shock wave. Earthquake duration of California seismic events is derived from an empirical fault rupture rate of one-half for every mile of rupture length. The duration, which has been estimated, represents the total duration of credible seismic events on a specific fault. It should be understood that the total earthquake duration will not be at the average bedrock acceleration as shown on Table 3. A breakdown of the total duration is as follows: for bedrock sites, the latter portion of the first one-third of the seismic record will experience horizontal accelerations approximating the average bedrock acceleration estimated; the middle one-third will rapidly attenuate from the initial higher levels; and the last one-third of the record will be attenuated even further.

2. MODES OF EARTHQUAKE DAMAGE

Damages from seismic events are due to five basic characteristics of fault movement. They are: 1) ground shaking, 2) surface faulting, 3) ground failure, 4) seismic sea waves and seiches, and 5) flooding induced by seismic activity.

a. Ground Shaking

Ground shaking is probably the most damaging result of an earthquake because of the large areas subject to shaking (San Francisco 1906, 8.3 magnitude felt over 375,000 square miles). Strong motion lasting a few seconds in a moderate earthquake to as much as four minutes in a great earthquake is exaggerated on loose, water-saturated ground, and less on solid rock. The 400 feet of sedimentary cover over the crystalline basement in the area is composed of young sediments. This sedimentary thickness and composition is conducive to the propagation of destructive seismic waves. Under these stratigraphic conditions, the severity of shaking motion may be as severe 10 miles from the faults as immediately adjacent to the faults. The destruction occurring from the 1952 earthquake is indicative of the damage that future earthquakes could cause. The parameters for ground shaking have been previously described.

From Table 3, it can be determined that the highest bedrock motion affecting the City of Tehachapi is controlled by the distance to the fault and the magnitude of the fault movement.

b. Surface Faulting

In a moderate earthquake, fault rupture along a rough plane in rock at average depths of three to ten (10) miles may or may not extend to the surface. Most, if not all, moderate California earthquakes have been accompanied by surface faulting. Surface faulting develops scarps (cliffs), grabens (trenches), fractures, and "moles tracks" or pressure ridges. Sometime spasmodic slippage ("creep") occurs along many active faults, with and without earthquakes. Movement directions may be right or left lateral, reverse, normal or oblique slips (See Figure 8).

Great earthquakes in California have been accompanied by several feet of surface fault displacement. San Francisco 1906 maximum 20 feet horizontal, right lateral; Fort Tejon 1857 estimated 30 feet right lateral. These are two of the greatest earthquakes to occur in California history.

The Tehachapi Creek Fault is designated on Seismic Safety Atlas Quadrangle "Tehachapi North," as a fault that displaces younger sediments or shows other evidence of recent movement. This fault and several splinter branches cut through the north east part of the City. There may be similar faults within the City that have not been identified because distinctive features have either not developed or have been removed by erosion or by activities of man.

In general, the possibility of surface faulting within the City of Tehachapi is considered to be low.

c. Ground Failure

Various types of ground failures accompany earthquakes. These include landslides, fracturing, cracking, and fissuring; liquefaction of sand layers, slumping, subsidence, and uplift tilting.

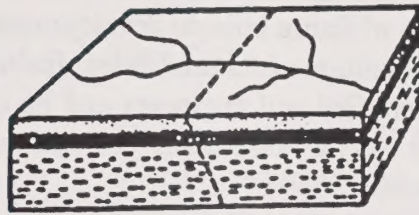
d. Landsliding

Mass movements of loose rock, soil, and water-saturated, weathered materials are major effects in all earthquakes large enough to be felt. These consist of landslides, rock avalanches, rock falls, mud and debris flows and all types of gravitational movements, and slides in highway cuts and downhill road shoulders are common after earthquakes.

TABLE 3

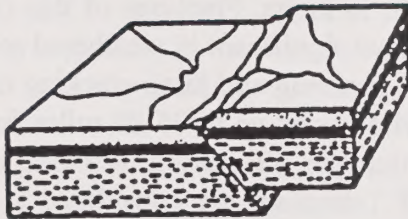
Siesmic Parameters of Active Faults
City of Tehachapi, California

Fault	Garlock			San Andreas			White Wolf		
Length (km)	210	210	210	1008	1008	1008	58	58	58
Closest City Fault Distance (km)	1.6	1.6	1.6	48.5	48.5	48.5	16	16	16
Magnitude (Richter)	6.5	7.0	8.0	6.5	7.5	8.0	6.5	7.0	8.0
Epicentral Distance (km)	1.6	1.6	1.6	48.5	48.5	48.5	32.8	32.8	32.8
Hypocentral Distance (km)	8.1	8.1	8.1	49.0	49.0	49.0	33.8	33.8	33.8
Peak Acceleration (g)	0.409	0.533	0.904	0.053	0.089	0.116	0.084	0.110	0.189
Duration of Shaking on Soil (seconds)	20	26	50	21	38	50	20	26	50
Duration of Shaking on Rock (seconds)	10	16	40	11	28	40	10	16	40
Predominant Period of Motion (seconds)	0.27	0.31	0.40	0.29	0.37	0.42	0.27	0.31	0.40



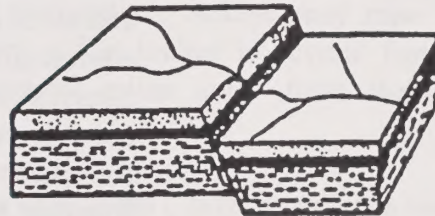
Earth block before movement

a.



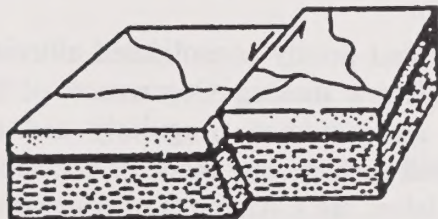
Thrust or Reverse fault

b.



Normal fault

c.



Left lateral fault

d.



Monoclinal fold caused by faulting at depth

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Types of Fault Displacement and Earth Flexure

Tehachapi General Plan Update
Tehachapi, California

Figure 8

The most highly developed part of the City is on a gentle north slope while the northern semi-developed part is located on a gentle to steep southwesterly slope. No landslides have been recognized within the City. Rules and guidelines of the Uniform Business Code should be strictly followed during the design of future hillside developments and possible hazardous soil conditions (old landslides, fractures, consolidations, etc.) by identified soil engineers and be corrected by geotechnical (shear keys, buttresses, compacted fill, etc.) mitigative measures.

e. Fracturing, Cracking, Fissuring

Ground shaking, settling, compaction of earth, and sliding produce irregular fractures, cracks, and fissures from a few inches to many feet in length. Such fractures may displace soil and earth in a manner similar to faults. Fractures of this type are rare in bedrock, but are most significant in weathered rock, alluvium, and soil. Extensive fissuring and lurch cracking may occur in weak soil and alluvial basins up to 75-80 miles from the epicenter of a great earthquake. Fracturing, cracking and fissuring within the City of Tehachapi are considered to be low to moderate.

f. Compaction, Subsidence, and Uplift

Compaction of loose soils and poorly consolidated alluvium occur as a result of strong seismic shaking. Occurrences of this mode of ground failure are patterned irregularly and are controlled in part by bedrock surfaces and mode of deposition (streambeds, swamps, old lakes, etc.). Amounts of compaction may vary from a few inches to several feet and may be significant in areas of thick soil cover (See Figure 4).

Tectonic subsidence, uplift tilting and warping are considered low for the City of Tehachapi.

g. Liquefaction

The American Geological Institute defines liquefaction as "the sudden large decrease of shearing resistance of cohesionless soil, caused by a collapse of the structure by shock of strain, an associated with a sudden but temporary increase of the pore fluid pressure (ASCE, 1958, term 205). It involves a temporary transformation of the material into a fluid mass."

From the definition quoted, it is obvious that shallow groundwater is a necessity for liquefaction to occur. Based on depth to groundwater of more than 100 feet below grade for the City of Tehachapi, liquefaction does not appear to be a hazard in this area.

h. Clay Soil

The type of clay soil that expands when moisture is added, thereby reducing the structural support to a building's foundation, is not identified in the City area.

i. Seismic Sea Waves and Seiches

Seiches, or periodic oscillations ("sloshing") of bodies of water such as ponds, lakes, and bays, usually occur in moderate to great earthquakes. Seiches may raise and lower water surfaces from a few inches to several feet, and may occur several thousand miles away from the earthquake epicenter.

A seismic sea wave or tsunami ("tidal wave") is a wave, which moves at velocities of 300-400 miles per hour and may be many miles long in deep open water. Approaching the shore, the wave may reach a height of 50 feet. Seiches and tsunamis will not affect the City of Tehachapi because of its inland setting and because of no significant bodies of water within its city limits.

j. Flooding Induced by Seismic Activity

Mountains to the south drain toward Tehachapi and vary in slope from 10 percent to 45 percent. The City of Tehachapi is located within the 100-year flood hazard zone, evident by recorded floods of 1890, 1932, 1938 and 1945, which were of nearly equal magnitude and caused extensive property damage and loss of life. Since these events, there has been a substantial increase in the Tehachapi Valley population. It is not unreasonable to assume that even greater loss of life and property damage, due to increasing urbanization since 1945, would occur if floods of this magnitude, either by long duration storms or a seismic event, are repeated. The Flood Insurance Maps (FIRM) were revised to reflect LOMR on March 15, 1995 and went into effect on June 15, 1995. The runoff water from the mountains lying two and one-half miles

south of the City is diverted into several flood-control facilities, including drainage channels (Highline Road), reservoirs and area facilities for conveying, retarding (Antelope Dam and Blackburn Dam), storing and recharging rain water.

A concrete-lined channel, north of Highline Road, has been constructed to divert water from mountain meadows south of the City to a 45 acre-foot flood-control reservoir south of the City.

Antelope Dam and Blackburn Dam, constructed on Antelope Creek and Blackburn Creek, will contain the flows of a one percent and four percent chance event, respectively.

The flood-control facilities, referred to above, are considered adequate under existing conditions to handle a 100-year frequency flood. Failure of these facilities could cause considerable loss of property and possibly life.

Extensive flooding could result from seismically induced sources outside the City. Landslides that dam a drainage channel and the subsequent failure of the dam could result in widespread destruction within the City. Seismically induced failure of the 45 acre-foot flood-control reservoir or the concrete-lined channel north of Highline Road could be hazardous.

In summary, considering the dry/low level conditions of the flood retarding and reservoir facilities most of the year, the permeability of the soils and the probability of a catastrophic seismic event during the peak capacity period, the hazards of a seismically-induced flooding shall be considered moderate.

II. EXISTING CONDITIONS

The City of Tehachapi has several existing conditions that provide the public with a safe living environment. Although the potential for damage resulting from future earthquakes cannot be ignored, Tehachapi is characterized by a number of factors, which tend to reduce earthquake hazards. Foremost among these are the relatively low-density character of the community and comparatively high level of seismic hazard awareness on the part of residents of the community and public officials.

Low density reduces the chances that any one fire would affect a large number of people. The relative newness and low-density form of the community are definite

assets when perceived in terms of seismic susceptibility. Future intensification trends will benefit from modern seismic design and construction technology, creating a positive environment for the total community.

One other condition that relates to the character of the City includes its location on a generally level floodplain. For these reasons, the City is not susceptible to the dangers from brush fires, slope instability, general subsidence, differential settling, or erosion.

Two other advantages are the quality of local fire control agencies and the availability of many high quality disaster response agencies, which serve the City. The Fire Department is highly rated and is willing to take advantage of new methods and equipment. They are also tied into a countywide response program, which allows them to handle most emergencies. Mutual aid agreements combine the disaster response capabilities of many agencies and jurisdictions, including neighboring cities and counties, enabling adequate responses to most foreseeable emergencies. The Tehachapi area has a cooperative response agreement with the Kern County Fire Department. The County provides full-time staff to four of the five area stations. The rest of the staff consists of resident volunteers. A breakdown of fire service distribution in the Greater Tehachapi and outlying areas is indicated in Table 4. Patrol and squad units are pickup trucks with water tanks and pumpers; patrol units are four-wheel drive trucks while squad units are two-wheel drive trucks.

The Tehachapi Fire Station is located at the southeast corner of the intersection of South Curry Street and Valley Boulevard. The station houses both the County and City fire fighting units which include three engines, two patrol units, and one squad unit. In the event of multiple fires occurring simultaneously within the City, or the occurrence of widespread fire, the other area stations are on alert for immediate assistance. Discussion is currently ensuing regarding a new station to be located in Golden Hills. In addition, a fire substation is to be built in the Capital Hills Specific Plan area prior to the completion of that project (Kern County Fire Department, 1990).

Tehachapi is fortunate in having a number of ordinances, programs, and requirements already in existence pertaining to seismic and fire hazards. Primary among these are the subdivision and building permit approval requirements for seismic strengthening, adequate access and minimum fire flow pressure. Upgrading of the water system is discussed in the Capital Improvement Element.

TABLE 4

Fire Protection Services

Station	Engine	Patrol	Squad	Staff
<u>Tehachapi</u>				
County	3	2	1	3 full-time
City	1	1	-	12-16 vol.
<u>Mojave</u>	2	1	-	5 full-time
<u>Keene</u>	1	1	-	3 full-time
<u>Bear Valley Spring</u>				
County	1	-	-	2 full-time
<u>Stallion Springs</u>	1 volunteer engine			

Public awareness of earthquake and fire hazards is another important consideration. The citizens are most cooperative in adhering to regulations and this awareness and cooperation contributes to understanding and cooperation during an actual emergency.

III. PROBLEMS AND ISSUES

Approximately 15 percent of Tehachapi, or 570 acres, has been committed to urban uses. Local development patterns have historically consisted of outward expansion, accompanied by gradual aging and intensification of uses in the older areas of the community. This trend is demonstrated by the fact that less than 25 percent of the total net additions to the City's housing inventory over the past ten years have been multiple units. The urban form, which is evolving, is susceptible to a variety of seismic and fire-related hazards.

Two major areas of concern have been identified: protection of existing, and management of future population and development.

A. PROTECTION OF EXISTING POPULATION AND DEVELOPMENT

It may be postulated that a seismic or fire-related event becomes hazardous only when it impacts human population and activities. The severity of impact is dependent not only on underlying geologic conditions in the case of seismic hazards, but on the character of population, activities, and associated structures as well. Based on this assumption, the conditions, which seem to imply the greatest fire and seismic hazard potentials in terms of existing population and development, are identified below.

B. HAZARDS

1. STRUCTURAL FIRE

Based on information provided by the Tehachapi Fire Department from January 1, 1996 through December 31, 1998, medical alerts appear to be the most common Fire Department response/activity. Responses to structural fires have remained relatively consistent and minor in comparison to the overall number of responses. It should be noted that past records were kept in a hand written ledger book and therefore difficult to retrieve and establish any kind of trend analysis. However, effective January 1, 2000, the Tehachapi Fire Department will be keeping all Fire Department activities on a computer generated data base program. As such the Fire Department can assess changes in the trends associated with Fire Department responses much more readily and ascertain if structural fires are representing a more significant segment of the responses.

	<u>January 1996 – December 1996</u>	
Medical Aids	272	Structure Fires 50
Watershed	45	Rescues 32
Hazardous Material	4	Public Service 85
False Alarms	50	

<u>January 1997 – December 1997</u>			
Medical Aids	281	Structure Fires	55
Watershed	52	Rescues	38
Hazardous Material	2	Public Service	97
False Alarms	52		

<u>January 1998 – December 1998</u>			
Medical Aids	301	Structure Fires	53
Watershed	65	Rescues	42
Hazardous Material	5	Public Service	125
False Alarms	76		

Structural fires generally are localized in a specific area. These types of fires have the potential to destroy millions of dollars worth of property. In addition, many of the City's industries store quantities of flammable and/or potentially toxic materials. Structural fires tend to pose the most danger to humans because of the greater probability of human presence. The threat of such occurrences requires that extra measures be taken to ensure adequate fire safety. Such as the incorporation strategy of the art sprinkler technology such as an early suppression fast response (ESFR) fire sprinkler systems in industrial structures.

The Kern County Fire Department has primary responsibility for all urbanized and much of the undeveloped portion of the planning area. Besides responding to fires, the Fire Department provides rescue services, responds to toxic materials emergencies, inspects commercial and industrial structures, and gives educational seminars and conducts fire awareness campaigns.

2. RANGE FIRES

Wildland fires result from the ignition of natural vegetation in undeveloped areas. The potential or and severity of damage caused by wildland fires is a function of a number of factors including type and amount of vegetation, topography, proximity to urban development and weather conditions. Wildland fires can be caused naturally by lightning or can be manmade through carelessness with flammable materials. Such fires result in the loss of wildlife habitat, watershed, and often structures when occurring close to urban areas.

Southern California has been in and out of drought conditions since 1971. This has been very apparent in the risk of potential wildfire hazard in the mostly undeveloped areas throughout the region. Drought conditions produce additional dryness in an already dry

landscape. Chaparral, in addition to being a vital area habitat, provides ready fuel for wildland fires. The landscape surrounding the urbanized portion of Tehachapi Valley consists of Chaparral, oak woodland and dry grasses.

In addition to being a destructive force, fire plays an important role in the ecology of Southern California vegetation. Many species have adapted to occasional immolation and the health and vitality of natural communities is often dependent on a cycle of fire. This conflict between the needs of the natural environment, the watershed, and recreation desires of humans must be recognized.

During the last four decades, very few fires in the range and timberland have occurred. Most of the damage was to the vegetation cover of the watershed area with almost no structural damage. Due to the increase in the population and the various structures in the area, a possible future fire may cause extensive damage to life and property. Mitigative measures as to proper irrigation, trimming of excessive vegetation and clearing of dead fuel, combined with public awareness and better fire-fighting equipment, should reduce this hazardous potential.

3. EARTHQUAKE-HAZARDOUS PRE-1933 BUILDINGS

Some buildings remain in Tehachapi, which were erected prior to enactment of the 1933 Building Code requirements for seismic resistance, resulting in their being constructed with little or no regard for the effects of earthquakes. Since building-permit requirements started being enforced in the City during the mid-40s, it is difficult to locate and analyze the age of many structures. It is known that some buildings in the Tehachapi region are nearly 100 years old. The majority of such structures are residences located in and around the downtown area. The City is fortunate in that many (more than 70 percent) of the pre-1933 buildings were damaged at the time of the Arvin-Tehachapi earthquake and when rebuilt were constructed under the new standards adopted for seismic resistance.

The social and economic ramifications concerning strengthening or demolishing these buildings are tremendous. Complex problems must be resolved concerning occupant safety and welfare. Many of those persons residing in pre-1933 hazardous building are elderly or economically disadvantaged. Such individuals have a limited number of adequate housing alternatives, and some may not be physically able to withstand the stress of dislocation. The same may be true of some businesses, which could not economically survive relocation.

An ill-conceived or improperly administered hazard abatement program is likely to have a severe impact on the community tax base. Other concerns include equitable treatment of building owners, minimization of adverse effects on the general business community, and the provision of adequate relocation service when required.

4. LINEAR SYSTEMS

The City of Tehachapi is dependent on a complex web of linear systems for a variety of vital support functions. Such functions include the importation and distribution of water supplies, collection and disposal of sewage, channeling of storm runoff, provision of natural gas and electrical power, communications, and transportation. Seismic or fire-caused interruption of such functions would, in varying degrees, impact the safety and welfare of City residents.

5. FIRE AND EARTHQUAKE INSURANCE

Although some major insurance companies offer fire and earthquake insurance, many citizens are unaware of this fact. Those persons who are aware of its existence feel that coverage restrictions and high deductible provisions make the protection unworthy of additional premium expenses. Since the 1989 San Francisco-Loma Prieta earthquake, and the 1990 Santa Barbara fire, much attention has been focused on the problem of disaster insurance and pressures to improve coverage provisions have been generated.

6. CROWD CONTROL AND DEPENDENT POPULATIONS

There are individuals and groups that cannot, due to age, disability, or confinement, be expected to adequately respond to stress situations resulting from seismic or fire-related events. These individuals and groups include the physically and/or mentally handicapped, the very old and the very young. The 1990 Census indicates that there are more than 550 children less than five years of age, and nearly 280 adults over 75 years of age within the City. Some dependent populations are concentrated in institutional facilities or areas catering to their particular needs. Others, such as the very young, are dispersed throughout the urban area. In instances where there is a large population of dependent individuals, supervisory or custodial personnel may be inadequate to provide guidance in times of emergency. Such a situation presents a potential for chaos resulting in otherwise avoidable deaths and injuries.

7. MULTI-STORY BUILDINGS

As multi-story buildings are being constructed, the concentration of large numbers of occupants inside these structures intensifies the potential for a disaster. In addition, the use and structural characteristics, combined with difficulties related to emergency response and disaster control procedures, make medium and high-rise development particularly susceptible to fire or seismic hazards.

Dependency on internal support systems, including ventilation, water availability and pressure and elevator systems, increase the sensitivity of multi-story structures to fire or seismic hazards. Such systems may fail during a fire or earthquake when they are most critically needed.

Emergency response and disaster control procedures become increasingly difficult with taller buildings. Access of personnel and equipment to upper story fires is a major problem. Evacuation of building occupants is another. Helicopter lift-off or aerial ladder evacuation may be required if smoke or mechanical failures block normal exist routes. Inadequate or inoperable internal communication systems hinder efforts to locate and evacuate trapped occupants.

8. HOSPITAL AND MEDICAL FACILITIES

Tehachapi residents are served by one hospital, with a bed capacity of 28. In addition, two private health care facilities and one ambulance service facility provide medial services to the residents. There is also a for profit acute care facility being established just west of the City limit on Highway 202. This facility represents an adaptive reuse of a restaurant structure and will include a surgical unit and provide some services currently not available at the Tehachapi Hospital.

Hospitals and health care facilities offering a wide variety of medical services rely on highly sophisticated and sensitive equipment for a number of life-maintenance functions. Fire or earthquake damage to such equipment would directly affect the safety and well being of present and future patient populations.

Facilities vital to post-disaster response efforts include fire control and law enforcement facilities, hospitals, and emergency operations control and communication centers. It is imperative such facilities be able to withstand the effects of a major disaster and remain fully functional. In this regard, factors warranting careful consideration include seismic design and construction requirements, site location and accessibility, impacts resulting from damage to adjacent

buildings, and the degree of usability of vital facilities following a major disaster.

Patient populations are commonly characterized by physical or mental disabilities. Such disabilities inhibit the patient's capacity to react during a crisis. In disaster emergency situations, the number of personnel is usually inadequate to provide proper assistance. Even if adequate aid were provided, many ailments would be seriously aggravated by stress situations.

9. INDOORS PUBLIC ASSEMBLY FACILITIES

Many structures can be categorized as indoors public assembly facilities. These may include entertainment, religious and recreational establishments, as well as public and semi-public institutions such as schools, churches, auditoriums and gymnasiums.

The one characteristic common to all public assembly facilities is the concentration of large number of people. This condition provides the potential for mass panic response to a crisis situation. A mass response of this nature can ultimately cause more casualties than the originating event. Factors including unfamiliar surroundings, lack of knowledge concerning exit routes, and loss of orientation heighten the disaster potential. When a disaster occurs in a crowded facility and causes extensive damage and injury, provision of required medical aid is difficult.

10. INDUSTRIAL HAZARDS

Hazards of transportation, manufacturing, and storage of volatile products present additional fire potential. New industrial processes and the development of new fuels, plastics, and chemicals have required continuous upgrading of fire control technology and contingency planning. These efforts are directly related to the physical and economic well being of the industries, industrial employees, and the general public. The impact of hazardous materials is further discussed in the following subsection.

11. HAZARDOUS MATERIALS MANAGEMENT

Hazardous materials and wastes are found in every home, most places of employment, and with commercial transporters. Over the past two decades, concern with the proper use and handling of hazardous materials and wastes have prompted a broad range of regulations from all levels of government. As the number and scope of regulations

promulgated increases, more and more responsibility for the implementation and enforcement of these programs has shifted to the local government level.

Hazardous materials management programs provide benefits to individuals, public and private sectors, and the environment. Current and future residents will benefit as much as businesses and government from these programs, since proper management of hazardous materials in the environment today prevents problems for tomorrow.

12. HAZARDOUS MATERIALS REGULATION

Generally, many types of businesses handle toxic chemicals and wastes in the City of Tehachapi. For the purposes of this Element, a waste is defined as a hazardous or toxic material for which no use or reuse can be found at the primary point of generation and which must be managed in a process separate from the generation process.

Kern County has determined that the following constitute the primary sources of hazardous waste generation:

- a. Industrial and commercial operations, which generate large quantities of hazardous wastes, which are treated, stored or recycled onsite.
- b. Industrial and commercial operations which generate large quantities of hazardous wastes which are transported or exported offsite for treatment, recycling, or disposal.
- c. Wastes from small commercial and industrial operations and household hazardous wastes.
- d. Wastes from cleanup of hazardous waste contaminated sites including contaminated soils and asbestos-containing wastes.

13. HAZARDOUS MATERIALS USE PLAN

In accordance with State Law, the City of Tehachapi has elected to adopt the applicable portions of the County Hazardous Waste Management Plan, Volume I ("The Plan") dated January 30, 1989, by reference to the extent that the objectives, needs & policies, and goals & recommendations (a) do not conflict and (b) are consistent with the goals, policies, procedures, and criteria set forth in this Element.

The County Plan was certified by the City of Tehachapi on April 15, 1991 and is superseded by the provisions of this Element and by any City ordinances implementing the provisions of this Element.

Land use planning in California, almost the exclusive responsibility of local government, is one of the most potent tools available to communities for preventing toxic contamination of natural resources. Historically, prevention of toxic materials incidents and contamination has not been considered a part of the land use planning process. Since land use powers are primarily applicable to businesses that want to establish new facilities in the Tehachapi community, land use review procedures and regulations will be most useful if they are developed before businesses begin new operations in Tehachapi. Proactive decision-making will provide the most protection to residents, specify expectations for businesses, and effectively utilize the City's resources.

In addition to businesses which generate and manage hazardous wastes, many businesses use and store hazardous materials either as raw materials or for end use. The Kern County Fire Department (KCFD), Hazardous Materials Section, is responsible for administering the provisions of AB 2185/2187/2189 requiring businesses which handle toxic materials and wastes to submit an inventory and an emergency response plan. KCFD also is responsible for the administration of AB 3777, which requires businesses that handle designated acutely hazardous materials to prepare "risk management prevention plans". Therefore, a readily available source of information about the locations and types of chemicals used by businesses exists to assist the City of Tehachapi in its efforts to evaluate the types and magnitude of risk posed by commercial and industrial chemical use in the community.

In addition, the County of Kern Environmental Health Service Department requires the completion of a Hazardous Materials Business Plan. In this regard, hazardous materials is defined as any material that is flammable, toxic, corrosive or reactive. It could also be a material that, because of its quantity or characteristics, poses a threat to employee health and safety or to the environment. Hazardous materials include many common materials, such as: **any compressed gas; all types of oils, fuels (gasoline and diesel), and solvents; acids; bases; pesticides; radioactive materials; and explosives; and any wastes from these products.**

Any business that handles hazardous materials **at any time** during the year in excess of the following minimum reporting quantities must file a Business Plan:

55 gallons for liquids

500 pounds for solids (10 pounds or more for explosives)

200 cubic feet for compressed gases

Any type or quantity of radioactive sources requiring registration with either the State of California or the Nuclear Regulatory Commission.

13. SLOPE STABILITY/FLOODING

Since the City is relatively flat, no slope stability problems are anticipated. Analysts describe floods of different sizes in terms of their statistically projected frequency. For example, a 100-year flood is the size flood, which has a 1.0 percent chance of occurring in a given year. While a 500-year flood is one which has a 0.2 percent chance of happening in any year. A 500-year flood would be slightly deeper and cover a greater area than a 100-year flood.

The Tehachapi Valley is fed by several important drainage channels including Brite Creek, Water Canyon Creek, China Hill Creek, Antelope Creek and Blackburn Creek from the south and Whiterock Creek from the north. A substantial drainage barrier exists in the valley center, which routes surface runoff from Blackburn and Whiterock Creeks to Proctor Lake Playa. The remaining watersheds flow through the collector systems of Brite and Tehachapi Creeks.

Antelope and Blackburn Creeks are the principal drainage in the general vicinity of the City of Tehachapi. These two combined watersheds drain approximately 17 square miles and have their headwaters south of the City in the Tehachapi Mountains. As these drainages reach the valley floor their channels become indistinct. During periods of peak storm water discharge, significant surface flows are generated. The surface flows spread across agricultural lands in the valley and subsequently flow through the City to be collected ultimately by the Tehachapi Creek system.

These surface flows have been responsible for significant flooding in the City of Tehachapi vicinity. Major economic losses from such floods occurred in 1932, 1928, 1945 and 1978. A flood insurance study conducted by Boyle Engineering for the Federal Emergency Management Agency, completed in November 1981, describes most of the City of Tehachapi as subject to potential flood hazards (this

includes lands designated as lying within the designated floodway, the 100 year flood zone and 500 year flood zone). Historically, flows from the north combined with the runoff from the south creating flooding in the area where Highway 58 is now constructed and eventually flowing into Tehachapi Creek. When Highway 58 was constructed it effectively separated the northerly and southerly portions of the low-lying area north of the urbanized area. Floodwaters from the south are no longer able to flow north of Highway 58.

Construction of the Tehachapi Watershed Plan has alleviated a major portion of potential flooding problems. The Watershed Plan consist of a program of structural measures to alleviate flooding problems. The structural measures were installed by project sponsors with assistance from the Soil Conservation Service. The project is sponsored by the Tehachapi Resource Conservation District, the Tehachapi-Cummings County Water District, the City of Tehachapi and the Kern County Water Association.

The structural program includes floodwater retarding structures (dams) with diversion inlets at the mouths of both Antelope and Blackburn Canyons, 0.2 miles of channel enlargements, and 20.5 acres of wildlife habitat development (Antelope Run). While these changes are generalized and apply more to larger communities, the effects will become prevalent as the Tehachapi area urbanizes.

B. DISASTER RESPONSE PROBLEMS

In a review of disaster response efforts after the 1971 San Fernando and the 1987 Whittier earthquake, the Los Angeles County Earthquake Commission determined that while most agencies responded well, and the problems encountered were within their capabilities to solve, there were inadequacies. Similar inadequacies may exist for Kern County and the City of Tehachapi.

One problem that must be dealt with is the initial assessment of damage. Despite immediate reconnaissance operations launched by police and fire officials, some areas heaviest hit by both earthquakes were not discovered until well after the events.

A problem related directly to that of damage assessment is the loss of communications. Communications systems are an essential element in the conduct of emergency operations. It seems clear that any communication system dependent on landlines and commercial power is susceptible to earthquake damage.

Another major problem of disaster response and recovery operations is that of evacuation. This involves the identification of areas or structures requiring

evacuation, determination of available evacuation routes and modes, and establishment of assembly points for displaced persons. The potential for widespread damage resulting from a major quake complicates evacuation efforts.

Other factors, which could significantly inhibit response and recovery operations, include loss of adequate water pressure for fire control purposes and blockage of transportation corridors resulting in the isolation of critically damaged areas. These situations were not commonly encountered in 1971, but in the 1987 Whittier Narrows earthquake, severe structural cracks occurred within the foundation of the interchange between Interstate Highways 5 and 605, which normally handles 400,000 vehicles each weekday, causing CalTrans officials to close it for one day for temporary repairs. Also, the 1989 Loma Prieta-San Francisco earthquake saw the collapse of the Nimitz Freeway.

The situation at San Fernando Veterans' Hospital following the 1971 quake provides an example of how many problems combine to frustrate emergency response efforts. The first shocks of the earthquake were felt by county residents shortly after 6:00 a.m. The damage at San Fernando Veterans' Hospital was discovered by Los Angeles City Fire Department personnel at 7:23 a.m. Although City fire control units were immediately dispatched to the scene, the County Fire Department responsible for this unincorporated territory was not notified until 9:05 a.m. The County Sheriffs Department was informed at 10:30 a.m. Further communication problems resulted in agencies responding to calls for aid without knowing the extent of damage, or even if another agency had already responded.

1. SCHOOLS

After the Long Beach earthquake of 1933, the California State Legislature passed the Field Act, requiring all school structures to be earthquake resistant. Presently, no grade schools built prior to 1933 are in operation in the Tehachapi Unified School District.

Other safety considerations include the concentration of large student bodies within single structures, problems related to the supervision of younger children during post-disaster periods, and difficulties in reuniting children with their parents.

The Tehachapi Unified School District currently has a disaster plan, which varies from resuming classes and sending children home on regular bus routes to holding children in schoolyards for parent pickup. The specific post-disaster action depends on the extent of area damage.

C. SUMMARY OF HAZARDS

Environmental hazards occurring in the City of Tehachapi can be divided into two major categories: naturally occurring hazards and man-made hazards. Naturally occurring hazards include earthquakes, wildland fires, floods, and slope failure. Chemical contamination, structural and chemical fires, transportation accidents and air and water pollution are examples of man-made hazards.

The precise nature and level of risk to the community for various hazards is dependent on a variety of environmental and cultural factors. For example, proximity of a structure to an earthquake fault does not necessarily determine the potential for damage to that structure. Groundwater levels, soil compositions and geologic substructure are environmental factors, which can influence the potential for structural damage and loss of life during a seismic event.

An assessment of the risk potential for environmental hazards in the City of Tehachapi area is summarized in Table 5. Included in the table are the expected geographic extents and levels of emergency response needed to deal with the event. Each potential hazard to the public safety has been assessed according to the following levels of risk:

- ❖ Low Risk - The level of risk below which no specific action is deemed necessary. The occurrence of a specific event is unlikely.
- ❖ Medium Risk - The level of risk above which specific action is required to protect life and property, though the probability of the event taking place is low to moderate.
- ❖ High Risk - Risk levels are significant and occurrence of a particularly emergency situation is highly probable or inevitable.

The “scope of risk” refers to the geographic area that could be potentially affected with the occurrence of one of the hazards. The scope of risk also includes three levels:

- ❖ Local - The affected geographic area that is directly affected is localized or site specific.
- ❖ Citywide - The affected area includes a significant portion or the entire City.
- ❖ Regional - The affected area includes the entire City as well as the surrounding region.

The State Office of Emergency Services (OES) has established three levels of emergency response to peacetime emergencies, which are based on the severity of

the situation and the availability of local resources in responding to that emergency. The three levels of emergency response include:

- ❖ Level 1: A minor-to-moderate incident wherein local resources are adequate in dealing with the current emergency.
- ❖ Level 2: A moderate-to-severe emergency where local resources are not adequate in dealing with the emergency and mutual assistance would be required on a regional or statewide basis.
- ❖ Level 3: A major disaster where local resources are overwhelmed by the magnitude of the disaster and State and Federal assistance are required.

Those hazards of greatest concern to Tehachapi residents are evident from the examination of the "level of risk" columns in Table 5.

1. SEISMIC ZONING

After a complete evaluation of the dynamic properties of the data presented on Figures 1 to 7, and the estimated seismic parameters shown on Table 3, it was determined that the seismic zoning techniques for the City of Tehachapi should be generalized and simplified. The basic variables considered are the presence of surface faulting, type of geologic materials, depth to groundwater, and the seismic ground response.

The City of Tehachapi is underlain by thick alluvium and will therefore have a uniform seismic response within the City. The only expected damage is from shaking and a geologic/seismic and soils report should be required for all critical facilities and multi-story structures which comments on the intensity of shaking.

TABLE 5

Environmental Risk Analysis

Environmental Hazard	Potential of Occurrence			Scope of Risk			Emergency Reponse		
	Low	Medium	High	Local	City	Regional	Level 1	Level 2	Level 3
EARTHQUAKE									
Surface rupture	*			*			*		
Liquefaction	*			*			*		
Ground-shaking			*			*	*		
Slope failure	*						*		
Tsunami	*						*		
Dam failure		*			*			*	
LANDSLIDE	*			*			*		
FLOODING									
Local ponding		*		*				*	
50 year flood		*			*			*	
100 year flood		*			*			*	
FIRE									
Industrial		*		*			*		
Chemical		*		*			*		
Gas main		*		*			*		
Subsurface		*		*			*		
High-rise	*						*		
Wildland			*			*		*	
CHEMICAL CONTAMINATION									
Road spill		*		*				*	
Airborne		*		*			*		
Subsurface		*		*			*		
Radiological		*			*			*	
SEVERE AIRBORNE									
Pollution episode		*				*		*	
MAJOR ACCIDENT									
Industrial		*		*				*	
Major road			*	*				*	
Aircraft			*	*				*	
Railway		*		*				*	
WATER SHORTAGE									
Supply		*				*		*	
Distribution		*			*		*		

D. EMERGENCY PREPAREDNESS PLAN

The emergency response capability within Tehachapi is geared primarily toward non-disaster incidents, and police and fire capabilities will be overwhelmed in a large disaster.

Effective implementation of seismic policies will help reduce the magnitude of damage in an earthquake, but a variety of damages should still be anticipated. Effective response to a disaster or to a warning of disaster is essential to life saving and the reduction of subsequent property damage and social dislocation.

The City of Tehachapi's Emergency Preparedness Plan is a document which addresses the jurisdiction's planned response to extraordinary emergency situations associated with natural disasters, technological incidents, and nuclear operations. The plan does not apply to normal day-to-day emergencies and the well-established and routine procedures used in coping with such emergencies. Instead, the operational concepts reflected in the plan focus on potential large-scale disasters, which can generate unique situations requiring unusual responses. Such disasters pose major threats to life and property and can impact the well being of large numbers of people.

The Emergency Preparedness Plan is placed into effect immediately upon the existence or declaration of a state of emergency for the state or nation. It may also be placed into effect in case of local disaster by action of City officials.

The plan provides overall organizational and operational concepts for responding to various types of identified hazards. Included are listings of responsible response agencies, emergency action checklists for hazard-specific responses, and operational data such as listings of resources, key personnel, essential facilities, etc. The plan is updated on a periodic basis to improve disaster response and recovery operations.

In a major disaster, mutual aid sources in adjacent jurisdictions are likely to be fully committed to their own needs, and there may be substantial delays in the request and transport of assistance from more distant locations. Access to and egress from the City is likely to be inhibited by damage caused by the disaster and related congestion and accidents.

Effective disaster preparedness will require the concerted efforts of City agencies, residents, and the business community. Not only must effective plans and procedures be in effect, but also those plans should be tested and improved through frequent disaster exercises.

1. PLANNING FOR POST-DISASTER RECOVERY

The City's ultimate post-disaster survival will depend not only on the effectiveness of hazard mitigation and disaster response programs, but also on

how quickly and how well the City is rebuilt after a major disaster. Without preplanning, effective programs and options for rapid reconstruction will not be possible in the immediate aftermath of an earthquake, fire, or other disaster.

A damaging disaster presents both problems and opportunities in urban land-use management. For example, if there are larger areas of substantial damage, there may be need for short-term redevelopment. This would also provide opportunities for upgrading of the City through such measures as revised street and traffic patterns, parking, architectural and landscape design, and general land-use compatibility. It would also provide an opportunity to mitigate specific hazards discovered in the disaster.

2. MANAGEMENT OF FUTURE DEVELOPMENT

Based on current growth trends 2010, it is projected that a population of approximately 9,000 people will reside in Tehachapi. Seismic and fire hazards affecting existing populations in the City may in some instances apply to over 14,000 new residents as well. However, the susceptibility of additional population and growth is more directly related to necessary expansion and intensification of existing urban uses.

The low-density character of Tehachapi has been mentioned as a positive factor in terms of general safety. The intensification of existing urban uses required to accommodate future populations may to some degree increase susceptibility to fire and/or seismic events.

The expansion of urban uses is preceded by, or accomplished in conjunction with, the expansion of linear systems, and the provisions of a wide range of vital services and facilities. Location of these services, facilities, and systems will most certainly be influenced by factors other than optimal safety considerations.

A number of procedural issues come into focus when future growth is viewed in terms of fire and seismic safety. Among the more important concerns is the question of property rights, public liability, and the local government's role in identifying and mitigating unacceptable risks.

3. TEHACHAPI EMERGENCY OPERATIONS PLAN

The Tehachapi Emergency Operations Plan (EOP) describes how the City will manage and coordinate resources and personnel responding to emergency situations. The EOP contains two (2) volumes and three (3) appendices, and is designed to meet both California and Federal Plan requirements. The plan provides conformity to the following:

- ❖ Conforms to the California Mandated Standardized Emergency Management System (SEMS).
- ❖ Provides Emergency Operation Center (EOC) responders with procedures, documentation and check list to effectively manage agencies.
- ❖ Provides detailed information in supplemental requirements such as Public Information, Damage Assessment and Recovery Operations

This SEMS Emergency Plan addresses Tehachapi's planned response to extraordinary emergency situations associated with natural disasters, technological incidents, and national security emergencies. The plan does not address normal day-to-day emergencies or the well-established and routine procedures used in coping with such emergencies. Instead, the operational concepts reflected in this plan focus on potential large-scale disasters, which can generate unique situations requiring expanded emergency responses.

This plan is a preparedness document designed to be read, understood, and exercised prior to an emergency. It is designed to include the City of Tehachapi as part of the California Standardized Emergency Management System (SEMS).

Each element of the emergency management organization is responsible for assuring the preparation and maintenance of appropriate and current standard operating procedures (SOPs)/emergency operating procedures (EOPs), resource lists and checklists that detail how assigned responsibilities are performed to support SEMS plan implementation and to ensure successful response during a major disaster. Such SOPs/EOPs should include the specific emergency authorities that designated officials and their successors can assume during emergency situations.

ASSUMPTIONS:

- ❖ The City of Tehachapi is primarily responsible for emergency actions and will commit all available resources to save lives, minimize injury to persons, and minimize damage to property.
- ❖ The City of Tehachapi will utilize SEMS in emergency response operations.
- ❖ The Director of Emergency Services will coordinate the City's disaster response in conformance with its Emergency Services Ordinance.
- ❖ Tehachapi will participate in the Kern County Operational Area.
- ❖ The resources of the City of Tehachapi will be made available to local agencies and citizens to cope with disasters affecting this area.

- ❖ Tehachapi will commit its resources to a reasonable degree before requesting mutual aid assistance.
- ❖ Mutual aid assistance will be requested when disaster relief requirements exceed the City's ability to meet them.

EMERGENCY MANAGEMENT GOALS:

- ❖ Provide effective life safety measures and reduce property loss.
- ❖ Provide for the rapid resumption of impacted businesses community services.
- ❖ Provide accurate documentation and records required for cost recovery efforts.

ACTIVATION OF THE SEMS EMERGENCY PLAN:

- ❖ On the order of the official designated by the City of Tehachapi's Ordinance 72-0-386, which contains provisions relevant to emergency response. City Resolution 2-73 which provides legal empowering authority for the Director of Emergency Services.
- ❖ When the Governor has proclaimed a State of Emergency in an area including this jurisdiction.
- ❖ Automatically on the proclamation of a State of War Emergency as defined in California Emergency Services Act (Chapter 7, Division 1, Title 2, California Government Code).
- ❖ A Presidential declaration of a National Emergency.
- ❖ Automatically on receipt of an attack warning or the observation of a nuclear detonation.

HAZARDOUS MATERIALS:

The Kern County Fire Department is designated as the lead Administering Agency for Hazardous Materials (HAZMAT) Response for Kern County. (Reference: Kern County Area Plan for Hazardous Material Incidents of July 1990.) This SEMS Emergency Plan complies with, and relies on the Kern County Area Plan for Hazardous Material Incidents as required by NRT1-A.

APPROVAL AND PROMULGATION:

This SEMS Emergency Plan will be reviewed by all departments/agencies assigned a primary function in the Emergency Responsibilities Matrix. (See Volume Two,

Chapter Two, SEMS). Upon completion of review and written concurrence by these departments/agencies, the SEMS Emergency Plan will be submitted to the Inland Region Office of Emergency Services for review and then to the City Council for review and approval. Upon concurrence by the City Council, the plan will be officially adopted and promulgated.

TRAINING AND EXERCISES:

Training and exercises are essential at all levels of government to make emergency operations personnel operationally ready. The objective is to train and educate public officials, emergency response personnel, business representatives, and the public. The City Manager is responsible for coordination and scheduling of training and exercising of this plan. Emergency Plan training should include plan orientation, EOC procedures, and State OES mandated SEMS training. The Fire Department will conduct regular exercises of this plan to train all necessary county and city staff in the proper response to disaster situations.

The best method for training staff to manage emergency operations is through exercises. An exercise is a simulation of a series of emergencies for identified hazards affecting the city. During these exercises, emergency response organizations are required to respond as though a real emergency had occurred. Exercises will be conducted on a regular basis to maintain the readiness of operational procedures.

The exercises should be designed to provide personnel with an opportunity to become thoroughly familiar with the procedures, facilities and systems which will actually be used in emergency situations. There are several forms of exercises that will be conducted.

- ❖ Tabletop exercises provide a convenient and low-cost method designed to evaluate policy, plans and procedures and resolve coordination and responsibilities. Such exercises are a good way to see if policies and procedures exist to handle certain issues.
- ❖ Functional exercises are designed to test and evaluate the capability of an individual function such as evacuation, medical, communications or public information.
- ❖ Full-scale exercises simulate an actual emergency. They typically involve complete emergency management staff and are designed to evaluate the operational capability of the emergency management system.

The separate departments and agencies are tasked with conducting field level hazardous materials responder training that meet state and federal mandated training requirements. Department/agency managers will ensure that accurate training records are maintained for all SEMS training, exercises, and performance in

accordance with regulations. Professional, comprehensive responder training is essential for the following areas:

- ❖ All First Responders (Law Enforcement, Fire/Rescue, EMS, OES personnel)
- ❖ Health and Safety
- ❖ Use of emergency response equipment and supplies
- ❖ Accessing Mutual Aid
- ❖ Hospital care of contaminated persons
- ❖ Monitoring and decontamination of personnel and equipment
- ❖ First-aid procedures for hazardous materials releases
- ❖ Public notification procedures
- ❖ Critical incident stress debriefings

MAINTENANCE OF SEMS EMERGENCY PLAN:

The SEMS Emergency Plan will be reviewed annually to ensure that plan elements are valid and current. Each responsible organization or agency will review and upgrade its portion of the SEMS Emergency Plan and/or modify its SOP/EOP as required based on identified deficiencies experienced in drills, exercises or actual occurrences. Changes in government structure and emergency response organizations will also be considered in the SEMS Emergency Plan revisions. The City Manager is responsible for making revisions to the SEMS Emergency Plan that will enhance the conduct of response and recovery operations. The City Manager will prepare, coordinate, publish and distribute any necessary changes to the plan to all jurisdiction departments and other agencies as shown on the distribution list on the Records Revision Page of this SEMS Emergency Plan. The City Manager will also review documents that provide the legal basis for emergency planning to ensure conformance to SEMS requirements and modify as necessary.

BASIC PLAN:

The Basic Plan addresses the City's planned response to emergencies associated with natural disasters and technological incidents including both peacetime and wartime nuclear defense operations. It provides an overview of operational concepts, identifies components of the City's emergency management organization within the Standardized Emergency Management System (SEMS), and describes the overall

responsibilities of the federal, state, county, and city entities for protecting life and property and assuring the overall well-being of the population.

AUTHORITIES:

Emergency response, like all governmental action, is based on legal authority. The Tehachapi Emergency Plan follows state and federal guidelines for conducting emergency planning, training, emergency response, and recovery.

California Emergency Services Act

The California Emergency Services Act (Chapter 7 of Division 1 of Title 2 of the Government Code), hereafter referred to as the Act, provides the basic authorities for conducting emergency operations following a proclamation of Local Emergency, State of Emergency or State of War Emergency by the Governor and/or appropriate local authorities, consistent with the provisions of the Act.

The Standardized Emergency Management System (SEMS) Regulations (Chapter 1 of Division 2 of Title 19 of the California Code of Regulations), hereafter referred to as SEMS, establishes the SEMS to provide an effective response to multi-agency and multi-jurisdiction emergencies in California. SEMS is based on the Incident Command System (ICS) adapted from the system originally developed by the Firefighting Resources of California Organized for Potential Emergencies (FIRESCOPE) program.

SEMS incorporates the use of ICS, the Master Mutual Aid Agreement and existing mutual aid systems, the Operational Area concept, multi-agency or inter-agency coordination and OASIS.

The California Emergency Plan, which is promulgated by the Governor, is published in accordance with the Act and provides overall statewide authorities and responsibilities, and describes the functions and operations of government at all levels during extraordinary emergencies, including wartime.

Section 8568 of the Act states, in part, that “the State Emergency Plan shall be in effect in each political subdivision of the state, and the governing body of each political subdivision shall take such action as may be necessary to carry out the provisions thereof”. Local emergency plans are, therefore, considered to be extensions of the California Emergency Plan. The 1990 California Emergency Plan is generally compatible with SEMS but will be updated.

The California Civil and Government Codes contain several references to liability release (Good Samaritan Act) for those providing emergency services.

This section Hazard Mitigation of the plan establishes actions, policies and procedures for implementing Section 409 (Minimum Standards for Public and Private Structures) of the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988 (Public Law 93-288, as amended), following a Presidentially declared Emergency or Major Disaster. It also assigns hazard mitigation responsibilities to various elements of federal, state, and local governments in California.

Hazard mitigation is defined as any action taken to reduce or eliminate the long-term risk to human life and property from natural hazards. Section 409 of Public Law 93-288 requires, as a condition to receiving federal disaster aid, that repairs and reconstruction be done in accordance with applicable codes, specifications, and standards. It also requires that the state or local government recipients of federal aid evaluate the natural hazards of the area in which the aid is to be used, and take action to mitigate them, including safe land use and construction practices.

To be effective, hazard mitigation actions must be taken in advance of a disaster. After disaster strikes, mitigation opportunities exist only during recovery, and even those opportunities can be limited by the absence of advance planning. Nevertheless, the immediate post-disaster period does present special opportunities for mitigation. Section 409 deals with the opportunities presented in a current disaster to mitigate potential hardship and loss resulting from future disasters. Thus, hazard mitigation is a continuing year-round effort and activity in which all local communities and state agencies are encouraged to prepare hazard mitigation plans that identify ways to reduce damage caused by disasters. Hazard mitigation includes such activities as:

- ❖ Improving structures and facilities at risk.
- ❖ Identifying hazard-prone areas and developing standards for prohibited or restricted use.
- ❖ Recovery and relief from loss, including insurance.
- ❖ Providing hazard warning and protecting the population.

MUTUAL AID:

The foundation of California's emergency planning and response is a statewide mutual aid system which is designed to ensure that adequate resources, facilities and other support is provided to jurisdictions whenever their own resources prove to be inadequate to cope with a given situation(s). The basis for the system is the California Disaster and Civil Defense Master Mutual Aid Agreement, as provided for in the California Emergency Services Act. This agreement was developed in 1950 and has been adopted by the state, all 58 counties and most incorporated cities in the State of California. The Master Mutual Aid Agreement creates a formal structure

wherein each jurisdiction retains control of its own facilities, personnel and resources, but may also receive or render assistance to other jurisdictions within the state. State government is obligated to provide available resources to assist local jurisdictions in emergencies. It is the responsibility of the local jurisdiction to negotiate, coordinate and prepare mutual aid agreements. Mutual aid agreements exist in law enforcement, fire services, medical and public works and are currently in progress for emergency managers (EMMA).

Mutual Aid System

A statewide mutual aid system, operating within the framework of the Master Mutual Aid Agreement, allows for the progressive mobilization of resources to and from emergency response agencies, local governments, operational areas, regions and state with the intent to provide requesting agencies with adequate resources.

The statewide mutual aid system includes several discipline-specific mutual aid systems, such as fire and rescue, law, medical and public works. The adoption of SEMS does not alter existing mutual aid systems. These systems work through local government, operational area, regional and state levels consistent with SEMS.

Mutual aid may also be obtained from other states. Interstate mutual aid may be obtained through direct state-to-state contracts, pursuant to interstate agreements and compacts, or may be coordinated through federal agencies.

RECOVERY:

Recovery from the effects of a major disaster begins immediately, and may continue for many years after the immediate emergency period. Recovery requires efforts of residents, businesses, non-profit organizations, City government, State government, and Federal agencies. Coordination of these efforts is critical to the recovery process.

The transition between emergency response activities intended to reduce loss of life and property, and subsequent efforts to restore normal life, cannot be precisely timed. Some of the early actions taken by the jurisdiction, for example safety inspections of buildings and debris removal, are considered the beginning of the recovery process.

The jurisdiction's recovery responsibilities fall into several general categories:

- ❖ Rebuilding damaged facilities and restoration of normal services.
- ❖ Guiding and facilitating the reconstruction of private housing and restoration of the jurisdiction's economy.

ECONOMIC RECOVERY:

Negative economic effects of a major disaster include:

- ❖ Severe damage to public buildings and infrastructure.
- ❖ Reduced property values.
- ❖ Loss of employers through damage or destruction of facilities or through inability to remain in business.
- ❖ Substantial reductions in sales and property tax revenue.
- ❖ Extraordinary emergency response expenses.
- ❖ Loss or disruption of housing, education, and health care facilities.
- ❖ Increases in liability claims against government agencies.
- ❖ Loss of property from the tax rolls.

Federal and State assistance programs provide limited help, usually only in coping with the direct losses.

Individual Assistance is provided through the Disaster Application Center (DAC), where representatives of public and private organizations with relief programs can be found under one roof by persons who need help. Assistance available through the DAC may include temporary housing, low-interest loans, money for shelter, clothing food, or "tools of the trade", and legal and tax advice.

Federal and State Public Sector Assistance Programs provide reconstruction money for public roads and buildings, and reimbursement for extraordinary costs of debris clearance and emergency protective work. The ability of jurisdictions to recover losses under these programs is highly dependent upon accurate initial damage assessments, careful documentation of losses and expenses, and active participation in the Federal and State damage surveys and final audits.

Private funding often provides the most significant part of recovery and reconstruction financing. Insurance proceeds and local bank financing are major contributors to recovery and reconstruction financing.

IV. OPPORTUNITIES

This document has so far presented a variety of fires, seismic and other hazards and problems that pose potential threats to the safety and well being of Tehachapi's

citizens. It is the responsibility of the City and other agencies to reduce or avoid such hazards wherever possible. Many of the means for accomplishing this have been mentioned in Section 2.0 (Existing Conditions). However, additional factors provide opportunities to reduce public exposure to various hazards.

It is anticipated that the City will experience additional physical, social, and economic growth during the next several decades. Much of this growth will be in the form of renovation and redevelopment of the existing older areas of the City. Tehachapi is presented with the unique opportunity to guide and direct the energies and interests of private industry toward the reduction of safety hazards.

Many existing City programs deal directly with public safety concerns. The existence of these programs and the ever-increasing knowledge derived from them provides City government with continuous opportunities to reduce unacceptable levels of risk associated with various safety hazards.

V. STATEMENT OF GOALS AND POLICIES

The goals of the Safety Element link the existing conditions, problems, and opportunities identified previously, with the policies and programs, which follow. Goals reflect broad aims and basic values. They establish emphasis and tone for policy and program formulation. The decisions and activities of City government pertaining to safety should be guided by the intent of the goals set forth.

The policies of the Safety Element provide direction for the achievement of element goals, and they will be carried out by the implementation of programs which utilize organized governmental resources for the mitigation or elimination of safety hazards.

The purpose of the Safety Element is to strive towards achievement of the following major goals and policies. The policies and programs are offered as a means of realizing their related goals.

Goal 1: The City of Tehachapi shall strive to ensure the protection of the life and property of its residents.

Policies

- a. Reduce the impact of fire and earthquake hazards in hospitals, other medical facilities, and indoor public assembly facilities; review and improve, as necessary, site design and construction requirements for these facilities, and encourage the strengthening of selected facilities not meeting current standards.
- b. Strengthen earthquake resistance standards for non-structural components of medium and high-rise buildings, including external veneers, internal partitions, lighting fixtures, furnishings, elevators, and equipment.
- c. Restrict development within active or potentially active fault zones.
- d. Support the use of new technology in the suppression and prevention of fires and floods and in the construction of seismically safe buildings.
- e. Encourage the use of smoke alarms and sprinkler systems in all structures.
- f. Improve fire and seismic safety programs for schools.
- g. Development proposals that conflict with airport approach surfaces, clear zones, or Federal Aviation Regulation Part 77 imaginary

surfaces as depicted in the Master Plan Report for the Tehachapi Municipal Airport or the Mountain Valley Airport are prohibited.

- h. Maintain a police-staffing ratio of one sworn officer equivalent for every 1,000 residents.
- i. Multi-story structures shall be required to perform a soils report to address the intensity of shaking during a seismic event and proposes appropriate utilization measures.

Goal 2: The City shall reduce adverse economic, environmental, and social conditions resulting from fire, seismic, and flood hazards.

Policies

- a. Establish and enforce standards and criteria to reduce unacceptable levels of fire, seismic and flooding risk.
- b. Encourage continued research in the field of fire and seismic safety.
- c. Strengthen existing codes and ordinances pertaining to fire, flooding, and seismic hazards.
- d. Adopt and enforce selective land use and building regulations within areas of high seismic and fire hazard.
- e. Provide for the needs of dependent populations in earthquake response and recovery operations.
- f. Improve the water supply system as funds become available.
- g. Expand public education programs pertaining to fires, seismic safety, and flooding.
- h. Encourage improved fire, earthquake, and flooding insurance programs.
- i. Review and improve disaster preparedness and emergency response capabilities.
- j. Develop greater public awareness and understanding of potential safety risks.

- j. Increase cooperation and coordination between the various jurisdictions and agencies involved in fire, seismic, and flood protection.

Goal 3: Determine the locations of potential sources of danger within Tehachapi and strive to minimize them.

Policies

- a. Require all new development and selected existing development to comply with established safety standards.
- b. Encourage the reduction of risks associated with hazardous old buildings through action programs including, but not limited to, renovation, occupancy reduction, and selective demolition.
- c. Encourage improved fire and seismic protection for multi-story structures and high-hazard industrial facilities.
- d. Promote modified standards for medium and high-rise development, incorporating safety considerations pertaining to building setback, access, and general site design.
- e. Improve fire and seismic design and construction standards for facilities housing dependent populations.
- f. Encourage the strengthening or demolition of school facilities, which are fire and/or seismic hazards.
- g. Encourage detailed site evaluations and improved design and construction standards for linear system nodal facilities.

Goal 4: Protect the health, safety and welfare of the people from hazards due to fire, man-made causes and natural causes related to seismic events.

Policies

- a. Provide police, fire and hazard control service capable of responding quickly and efficiently to meet any emergency.
- b. Prevent hazards through an ongoing program of education, inspection, and abatement.
- c. Provide sufficient equipment and manpower to adequately respond to emergency alarms in all parts of the City.

- d. Insure that buildings are designed, equipped and maintained for an adequate level of protection.
- e. Insure that emergency service personnel are trained to meet all situations under their jurisdictions.
- f. Promote and encourage adequate hazard control within the entire sphere of influence, including:
 - 1. Establish and maintain evacuation routes.
 - 2. Require minimum road widths.
 - 3. Provide for peak-load water supply.
 - 4. Require minimum clearance around buildings.
 - 5. Maintain an adequate emergency control center.
- g. Promote community education and understanding of the functions and responsibilities of the Fire Department and of the citizens themselves.
- h. Ensure that the City's facilities, equipment and supplies are protected.
- i. Require new construction to adhere to the Uniform Building Code.
- j. Encourage community education and understanding of the risks related to:
 - Electromagnetic fields,
 - Pipelines,
 - Seismic events,
 - Dams, and
 - Factories and processing plants.

Goal 5: Introduce safety considerations in the planning process in order to reduce loss of life, injuries, damage to property, and economic and social dislocation resulting from dangerous geologic occurrences.

Policies

- a. Provide a disaster management system embodying all aspects of pre-disaster preparedness and post-disaster response in accordance with established risk standards.
- b. Plan land uses so areas of expected seismic rupture are not developed.
- c. Conduct periodic structural and other types of building inspections.
- d. Conduct a public awareness program with property owners and with the general public, through the news media, to create public awareness and subsequent hazard reduction.
- e. Conduct an ongoing program for the correction of substandard conditions.
- f. Prepare for prompt and effective rescue, care and treatment of persons victimized or threatened by disaster.
- g. Carry out drill programs at schools, hospitals, and public buildings to train the occupants and staff in emergency techniques.

Goal 6: Protect the public from risks associated with pipelines used for the transmission of hydrocarbon related substances. In order to protect the people the City will control development around these potential risks to a greater degree than in areas not impacted by such risks.

Policies

- a. Pipelines in areas of pending development shall be clearly identified when development plans are submitted.
- b. Notes shall be placed on all subdivision maps that identify the proximity of pipelines to the area being subdivided.
- c. Pipelines shall be located adjacent to street rights-of-way when feasible and be constructed as deep as economically feasible.
- d. Ditch tape shall be used to identify pipelines where advisable.
- e. Concrete covers and conduits shall be considered when installing pipelines, and pipe thickness shall be as heavy a gauge steel as practical.
- f. Intervention of pipeline corridors shall be discouraged.

- g. Risk analysis shall be conducted prior to subdivision of land in close proximity to major transmission pipelines.
- h. A minimum setback of property lines, buildings and structures shall be 25' (twenty-five feet) from each side of a pipeline.

VI. STANDARDS AND CRITERIA

Safety standards and criteria provide the tools required to evaluate the adequacy of programs and practices employed to reduce disaster impacts. They establish a basis for comparison in measuring unacceptable levels of risk. In addition, they offer a means of comparing the effectiveness of existing practices with the goals and policies set forth in this element. The responsibility for establishing criteria and standards rests primarily with the local jurisdictions. The State has established some standards but has left local government the task of enforcing them.

Standards are specific quantitative measures. Conversely, criteria are general rules, and usually non-quantitative. The following paragraphs include a brief description of safety and seismic safety standards currently in effect, and a somewhat longer discussion of criteria for integrating the concept of “acceptable risk” into the decision making process of the City of Tehachapi.

A. STANDARDS

Standards for seismic design and construction have been employed in Kern County. These first standards, developed in response to the damage caused by the 1933 Long Beach earthquake, have been continuously revised and expanded.

Although there is no single unified set of safety standards, Tehachapi has evolved a series of standards, specifications, and regulations that apply to safety. These standards are incorporated into various codes and ordinances, including, but not limited to, the Building Code, the Fire Code, the Zoning Ordinance, the Subdivision Ordinance, and the Health and Safety Code.

B. CRITERIA

Criteria stress the achievement of program excellence or an ideal state beyond the framework of minimum standards. A framework for developing criteria to define unacceptable risk is contained in the following treatment of Acceptable Risk. While the emphasis is on seismic risk, the concept is equally applicable to fire risks.

Review and revision of local safety standards is an ongoing process. Recommendations for modifications and additions are included in the Implementation Program of this Element.

1. CRITERIA FOR EVALUATING RISK

The State guidelines for developing a Safety and Seismic Safety Element introduced the concept of “acceptable risk,” and suggested that it be used as a guide for formulating plan policies and programs. Specifically, the guidelines suggest that a Policy Statement be included in the element, which specifies the level or nature of acceptable risk to life and property. It is further recommended that land-use standards be developed which reflect an acceptable level of hazard or risk.

There are three charges given to public officials by the Governor’s Earthquake Council: “to reduce loss of life, damage to property, and economic and social dislocations resulting from future earthquakes.”

These three concerns are not contradictory or independent but they are distinct. For any single project, there are essentially three separate risks, which must be evaluated: the risk to human life, the risk to property, and the risk of disruption. An example of the latter is utility structures, which, if damaged, may produce little in the way of direct effect on safety and property but would greatly disrupt the functioning of the community and its services for some time.

In recognition of this fact, disaster preparedness programs have been developed in cooperation with safety considerations and studies. Proper pre-disaster as well as post-disaster planning cannot proceed intelligently without a reasonable assessment of the risk of certain types of existing and future development.

Inevitably any undertaking has a certain level of risk associated with it, and a trade-off always exists between cost and risk reduction. Therefore, the simple statement that we must eliminate or reduce risk as far as possible is both impractical and unnecessarily restrictive. The acceptability of risk depends on the nature of the risk. At some level a risk becomes in some way “acceptable”.

Another factor in the acceptability of risk is the determination of who is taking the risk versus who is receiving the benefit. In order for there to be a meaningful use of risk-versus-benefit for planning purposes, the persons who are subjected to the risk should as much as possible be receiving the benefit. Those subjected to risk should be made aware of that risk and the potential harm it represents.

TABLE 6

Risks Of Fatal Injury - Representative Risks in Daily Life

Cause	Individual Probability of Fatal Injury Per Hour of Exposure
Natural Disasters	1 chance in 10 billion
Fossil Power Plants	2 chances in 10 billion
Radiation (100mrem/year)	5 chances in 10 billion
Electricity	10 chances in 10 billion
Smoking	5 chances in 10 million
Hunting	9 chances in 10 million
Skiing	9 chances in 10 million
Commercial Aviation	10 chances in 10 million
Motor Vehicles	10 chances in 10 million
Natural Diseases	10 chances in 10 million
General Aviation	3 chances in 10 thousand

These are average values. Some persons are subjected to higher risks from natural disasters, for example, because they live in earthquake zones or tornado areas, etc.

It is generally considered that the level of risk represented by natural disease is the maximum acceptable to large numbers of people for most normal activities. In addition, only voluntary activities, that is, activities where the individual person has a choice whether or not to participate, are acceptable as the risk approaches the level represented by natural disease.

There are many situations involving human safety, which at any one time have an extremely high-risk potential. No one is able to calculate a meaningful estimation of total risk in these instances. However, by separating total risk into several parts, all of which can be dealt with more or less independently, total risk can be estimated and measures taken to mitigate it. The following hypothetical risk analysis separates seismic risk into four factors, which can be viewed independently.

2. HYPOTHETICAL RISK ANALYSIS

- a. The number and magnitude of earthquakes in the fault systems near the area in question or the period questioned would be determined.
- b. The expected ground motion effect on slope stability, liquefaction, etc., would be determined for each type of earthquake possible. This

would be determined on the basis of site characteristics, soil, depth to bedrock and distance to fault.

- c. The response of the construction (buildings, utilities, roads, etc.) to the ground motions expected above would be determined. This would include factors such as the orientation, contents, parapets, as well as the type of construction.

The above steps are summarized as follows:

(General Geology) x (Specific Site) x (Structure) x (Uses) = Total Risk

One would prefer to be able to quantify the risks to such an extent that in each step an actual number, a probability of occurrence or risk, would be determined. For example, in Step 1, it might be determined that there is a 20% chance of an earthquake of magnitude 6.0 or greater in the next 20 years.

The appropriate considerations and their risk under each of the four categories above must take into account. Table 7 is a list of different types of structures and their relative risks. This is not a complete table of structures and their relative risks. Additional considerations to items listed would include parapets, building interiors, utilities, building orientation and frequency response. Table 8 displays a list of uses and the levels of risk associated with each type of use indicated.

To keep in line with the Governor's Earthquake Council's specific charges, there should be three such risk analyses done. One to ascertain the risk to human life and limb, another to ascertain the risk to property and the third to ascertain the risk of social and economic disruption. Of course, in order to make the final decision as to approval of any project, the cost and benefit to the public must be considered. For the public agency and ultimate decision consists of identifying and balancing all the costs and risks, including aesthetics and long-term planning, so that the maximum amounts of public safety and benefit are achieved.

There is a relatively large amount of reliable data available about the probabilities of certain magnitudes of earthquakes. The ground motion studies and predictions, which have been done, are becoming increasingly accurate although they are not at such a stage that they can easily and economically be applied to every new site in order to produce quantitative information. However, apparently because there have been so few large earthquakes in recent years in California and thus the existing types of California building practices have not yet been tested, the qualitative response of various structures has not been determined. Earthquakes such as San

Fernando (1971) and San Francisco-Loma Prieta (1989) have provided some information but more is needed.

A similar risk analysis can be done in a qualitative manner and arrive at a reasonable estimation of risk and a categorization into relative risks: high, questionable and low. On this basis, we can recommend a project be stopped, studied further with specific requirements or allowed to continue as is. If the risk came into the questionable category, we could lower the total risk by changing the factors at any or all of the steps outlined.

Factor changes discussed in the steps above include the following:

- a. At this point in time, it is not possible to control the frequency and magnitude of earthquakes. However, this may be possible in the future and there is research being done on this subject as well as on the prediction of earthquakes.
- b. Change the location of the project.
- c. Change the type or design of the construction.
- d. Change the use of the construction.

There are four broad but separate categories to be dealt with in considering the risk and alleviation of the risk. The task of the public official is to bring what is known about the hazards in each of these categories together for a reasonable estimation of total risk. These categories are useful for another purpose. In addition to providing a means of establishing the total risk, the categories make it possible to recognize quickly what additional information is necessary in order to make a risk assessment and to reach a rational decision about a particular site and project and its geologic hazards.

TABLE 7

Hazard Comparison Of Non-Earthquake-Resistive Buildings

Simplified Description of Structural Types	Relative Damageability (in order of increasing susceptibility to damage)
Small wood-frame structures i.e., dwellings less than 3000 sq. ft. and 3 stories.	1
Single or multi-story steel-frame buildings with concrete exterior walls, concrete floors, and concrete roof. Moderate wall openings.	1.5
Single or multi-story reinforced-concrete buildings with concrete exterior walls, concrete floors. Moderate wall openings.	2
Large area wood-frame buildings and other wood-frame buildings.	3-4
Single or multi-story steel-frame buildings with unreinforced masonry exterior wall panels, concrete floors and concrete roof.	4
Single or multi-story reinforced-concrete frame buildings with unreinforced masonry exterior wall panels, concrete floors and concrete roof.	5
Reinforced concrete bearing walls with supported floors and roof of any materials (usually wood).	5
Buildings with unreinforced brick masonry having sand lime mortar; and with supported floors and roof of any materials (usually wood).	7+
Bearing walls of unreinforced adobe, unreinforced hollow concrete block, or unreinforced hollow clay tile.	Collapse hazards in moderate shocks

TABLE 8

A Scale Of Risks

	Level of Risk to Public	Kinds of Structures	Approximate Extra Project Cost to Reduce Risk to Acceptable Level
Failure of Structure Affects Substantial Populations	Extremely High	Structures whose continued functioning is critical, or whose failure might be catastrophic: nuclear reactors, large dams, power inter-tie systems, plants manufacturing explosive.	Unknown percentage (amount required for maximum attainable safety)
	Slightly Lower than Above	Structures critical to post-disaster use: important utility centers, hospitals, fire, police and emergency communication facilities and critical transportation elements, such as bridges and overpasses.	20% - 25% of project cost
Failure of Structure Affects Occupants Only	Possible High Risk to Occupants	Structures of high occupancy, or convenient to post-disaster use: schools, churches, theaters, large hotels and other places normally attracting large concentrations of people, civic buildings, secondary utility structures, extremely large commercial enterprises, most roads, alternate or non-critical bridges and overpasses.	10% - 15% of project cost
	An "Ordinary" Level of Risk	The vast majority of structures: most commercial and industrial buildings, small hotels and apartment buildings, and single-family residences.	1% - 2% of project cost (2% - 10% occasionally)

* "Ordinary" risk: Resist minor earthquakes without damage; resist moderate earthquakes without structural damage, but with some nonstructural damage; resist major earthquakes of the strongest intensity and severity experienced in California, without collapse, but with some structural as well as nonstructural damage.

VII. IMPLEMENTATION PROGRAM

The critical factor in any planning effort is its implementation. This response, achieved through budgeted, attended programs, developed in response to adopted policies, ultimately brings about realization of the plan.

In previous sections of the Safety Element, emphasis has been placed on identifying potential hazards and formulating broad policy commitments for the reduction of risks. Attention must now be directed toward establishing an integrated set of action programs to implement safety policies and achieve the goals set forth.

These program recommendations are the result of an initial effort. The intent of this effort is to identify and evaluate major existing local, county, state and federal resources and then to point out how they deal with the problems identified. In addition, areas of concern, which are not currently addressed by existing programs, will be directed toward such omissions.

The current level of activity concentrates primarily on local programs. In the future, it is the intention of this element to intensify coordination with other agencies and the general public.

A. EXISTING PROGRAMS

This section contains a listing of programs and activities having significant or potential capability for implementing the Safety Element goals and policies.

1. City Programs

- a. Building Regulation
- b. Disaster Response Coordination
- c. Fire Protection
- d. Land Division Regulation
- e. Disaster Preparedness
- f. Emergency Medical Aid
- g. Grading Regulation
- h. Zoning Regulation
- i. Tehachapi Emergency Operation Plan (EOP)

2. County Programs

- a. Building Regulation
- b. Disaster Response Coordination
- c. Fire Protection
- d. Land Division
- e. Taxation

- f. Neighborhood Development
 - g. Zoning Regulations
 - h. Disaster Preparedness
 - i. Emergency Medical Aid
 - j. Geologic Mapping
 - k. Model Neighborhood
 - l. Relocation Services
 - m. Hazardous Waste Programs
- 3. Regional Programs
 - a. Intergovernmental Coordination (LOCE, KCOG, AQMD)
- 4. State Programs
 - a. Fire/Rescue Emergency Plan
 - b. Water Supply Management
 - c. Dam Safety
 - d. Geologic Research and Mapping
 - e. School Safety
 - f. Taxation
 - g. Dam Inundation Areas Evacuation
 - h. Fault Hazard Zone Mapping
- 5. Federal Programs
 - a. FIREScope
 - b. Relocation Services
 - c. Taxation
 - d. U.S. Geologic Survey
- 6. Other Implementation Activities and Processes
 - a. Community Relations
 - b. Legislative Actions
 - d. Long Range Planning
 - e. Public Education
 - f. Coordination and Review
 - g. Mutual Assistance/Aide
 - h. Research and Monitoring

In addition to the programs listed above, selected programs contained in this Safety Element contribute to the implementation of the safety policies.

B. OTHER PROGRAMS

The following lists the programs to implement the safety policies contained in the preceding sub section of the plan.

1. ZONING AND BUILDING CODES

- a. The building and zoning codes shall be amended to incorporate specific standards for siting, seismic design, and review of emergency response, assembly, and multi-story facilities.
- b. Detailed site studies for ground shaking characteristics, liquefaction potential and fault rupture potential shall be required as background to the development-approval process for emergency response, sensitive, assembly and multi-story facilities.
- c. Review of criteria shall be established for emergency response and sensitive facilities proposed in or near potential liquefaction areas. The criteria should include such concerns as blockage of road access and interruption of essential utility service as a result of liquefaction in the area.
- d. Zoning and building codes shall be amended for the dam failure inundation area to required discretionary approval of the Planning Commission and applicable review criteria for:
 1. The limited expansion of emergency response facilities. Construction or new emergency response facilities in a potential dam failure inundation area shall be prohibited;
 2. Sensitive facilities, including nursing homes, senior citizen housing and other low-mobility uses where rapid evacuation capabilities may be inhibited; and commercial and industrial facilities housing hazardous materials or potentially hazardous operations requiring safe shutdown procedures; and
 3. Multi-story buildings and all assembly facilities of 100 or more occupants.
- e. Criteria for efficient and orderly evacuation capabilities shall be incorporated into zoning, street planning, and other land use procedures for the potential inundation area below the dam.

- f. The State-mandated seismic evaluation of the Antelope and Blackburn Dams, currently being reviewed by the California Division of Safety of Dams, shall be monitored and the results documented as background for the City's zoning and disaster preparedness programs.
- g. Technical reviews of groundwater, liquefaction susceptibility, and fault zone data shall be conducted every three to five years at a minimum, for potential revisions in liquefaction susceptibility and fault zone designations and related land use and construction policies.
- h. Public participation shall be sought in the development of hazard mitigation and disaster recovery programs.

2. HAZARDS TO EMERGENCY RESPONSE FACILITIES

- a. Existing emergency response, sensitive, assembly, and multi-story facilities shall be reviewed for any significant siting, design or construction problems that would make them vulnerable in an earthquake. The findings shall be incorporated into emergency operation plans as well as addressed in longer-term programs of facilities upgrading or relocation.
- b. All emergency, sensitive, assembly and multi-story uses in the dam inundation should develop and maintain plans for efficient shutdown of their operations and evacuation of their facilities in the event of damage to the dam.
- c. Within one year of adoption of this Plan, essential facilities within the City shall be surveyed for seismic hazards and programs shall be developed as appropriate for correction of any significant problems that could jeopardize public health and safety or inhibit effective emergency response.

3. POTENTIALLY HAZARDOUS BUILDINGS

- a. Data on the current inventory of unreinforced masonry buildings shall be maintained and updated, including all information required under G.C. Section 887S.
- b. A strong, enforceable ordinance for upgrading of unreinforced masonry buildings shall be developed, and tailored to the local conditions in the City of Tehachapi. The ordinance shall include:

1. Priorities for the sequence of enforcement as appropriate to the use and occupancy types of unreinforced masonry buildings in the City of Tehachapi.
 2. Structural standards for seismic upgrading familiar to the seismic design and construction community in central California.
 3. Options or requirements for early anchoring of buildings, to provide an initial level of reinforcement at an early stage of seismic retrofit.
 4. Incorporation of concepts and provisions of the State code for historic buildings, to provide additional flexibility for preservation of historic and culturally significant buildings while protecting them from considerable earthquake damage.
 5. A five to eight year time schedule for reinforcement, with all upgrading completed during that time.
 6. Signs shall be posted and maintained on unreinforced masonry buildings to warn residents of the potential hazard.
- c. The following types of information should be developed in preparation for the ordinance, to provide a substantial basis for policy evaluations.
1. A disaster impact analysis of the City's unreinforced masonry buildings, including an assessment of potential casualties, damages, and economic and social impacts in the event of an earthquake.
 2. An environmental impact report for the proposed ordinance, including an assessment of social and economic impacts of the proposed correction programs. In particular, the potential effects of such an ordinance on viable housing should be evaluated.
- d. Strategies and program options should be developed for preservation or replacement of the low and moderate income housing currently located in hazardous buildings. Possible strategies include, among others: community redevelopment programs; low interest loans for seismic rehabilitation of residential buildings; preservation of non-conforming zoning rights for in-kind

replacement of residential buildings; and relocation assistance or any displaced occupants.

- e. Appropriate means of economic relief for commercial buildings that fall under the hazardous buildings program should also be considered, such as: preservation of nonconforming zoning rights for in-kind replacement of commercial buildings and community redevelopment programs for the coordinated upgrading of seismic, economic, and general design characteristics of affected commercial areas.
- f. A special recognition program for buildings that have been reinforced under the hazardous building ordinance should be considered, such as a plaque or certificate that can be displayed on or in the building.
- g. The City shall maintain a cognizance of other types of potentially hazardous buildings and develop programs for the reduction of seismic hazards. For example, concrete tilt-up and concrete frame buildings built before enactment of the current seismic codes should be required to meet basic seismic standards before a change in use or occupancy level is approved, or when significant alteration or repair is proposed.
- h. Special structural reviews shall also be conducted on any multi-story or concrete buildings receiving significant damage in an earthquake, prior to their repair or demolition. Structural reviews prior to their repair or demolition. Structural reviews prior to repair would be the responsibility of the owner; arrangements can be made with the Structural Engineers Association of California or the Earthquake Engineering Research Institute for support in the pre-demolition review of severely damaged buildings.
- i. Include the upgrading of potentially hazardous buildings as a contributing objective of any redevelopment project.
- j. Incorporate financial incentives and guidance for the seismic upgrading of older dwellings in any community development or housing rehabilitation program for older neighborhoods, including the possible use of low interest or tax-exempt loans.

4. BUILDING CODES AND REVIEW PROCEDURES

- a. The proposed seismic revisions to the Uniform Building Code shall be reviewed for early adoption and implementation. These

standards, as recommended by the Structural Engineers Association of California (1986) should be adopted on an interim basis for the design of large buildings.

- b. Future revisions to the seismic building code shall also receive early review and incorporation, as appropriate, into the City Building Code.
- c. The current code enforcement procedures for concrete tilt-up and composite prestressed concrete construction shall be reviewed for consistency with effective principles of seismic design, and revised as appropriate to maintain the seismic integrity of new construction.
- d. The highest and most current professional standards for seismic design shall be used in the design of emergency response, sensitive, assembly, and multi-story facilities, so that the seismic design of the facilities will not become substandard within a few hours.
- e. All components of the seismic design for emergency response, sensitive, assembly, and multi-story facilities shall be subject to independent, third party review by qualified professionals familiar with the most current professional standards for seismic design of those types of facilities.
- f. Effective review of seismic design for proposed buildings of three stories or more in height, or 6,000 square feet or more in ground level floor space shall be conducted by on-staff structural engineers or through third-party review by qualified engineers responsible to the City.
- g. All geologic and soils reports submitted to the Planning Department in the enforcement of general plan policies shall be reviewed for their adequacy and completeness by an experienced and respected geologist or soils engineer retained by the City.
- h. A central repository shall be established in the Planning Department for the collection and compilation of geologic and soils engineering information related to faults and fault zone studies, groundwater levels, soil characteristics, susceptibility to landslides and liquefaction, and other data, as appropriate. The range of opportunities for collection of new liquefaction and fault-related data shall be identified, and a long-term program developed for geologic inspection of all significant excavations in the fault zones. The cooperation of other agencies should be sought, to help identify additional opportunities for data collection. This information shall

be used to increase the knowledge and insights of City reviewers and applicants alike, in support of hazard mitigation.

- i. Within any fault precaution zones, fault studies shall be required for larger buildings with sensitive and high-occupancy uses, which could pose greater problems for evacuation in the event that fault rupture damaged the buildings. Buildings of three stories or more in height or 6,000 square feet or more in foundation area, and special uses such as facilities for the elderly, handicapped, or mentally impaired should not be exposed to potential fault rupture. For these reasons, preconstruction fault studies shall be required to help determine the presence and nature of any fault and to help in the adaptation of the building design to reduce or avoid potential damage.
- j. All construction excavations and trenches of five feet or deeper in mapped fault zones should be inspected by a qualified geologist for any evidence of faulting.

5. EMERGENCY PREPAREDNESS

- a. Appropriate disaster response and earthquake response plans shall be maintained and updated on a regular basis.
- b. Disaster response plans shall also include procedures for traffic control, emergency evacuations, and security of damaged areas.
- c. Effective procedures and contingencies for notification and evacuation of the designated inundation area shall be incorporated into the City's emergency preparedness plans and tested in disaster exercises.
- d. The City shall maintain effective mutual aid agreements for fire, police, medical response, public works, building inspection, mass care, and heavy rescue.
- e. Earthquake response exercises shall be conducted at least once a year. Exercises shall be designed to test and upgrade various disaster response plans and involve local residents, business persons, and other volunteers. Disaster planning scenarios and emergency response plans shall include contingencies for:
 - 1. Possible ruptures on both the Garlock and the Tehachapi Creek Faults, either separately or simultaneously;

2. Collapse of 50 buildings or more, including some mid-rise structures, some essential facilities, and numerous, potentially hazardous buildings;
 3. Sporadic ground rupture due to concealed fault branches, with major disruption of streets and utilities in some areas, and serious damage to homes and business;
 4. Rapid evacuation of the potential inundation area below Antelope and Blackburn Dams; and,
 5. Many aftershocks, continuing for several weeks or months.
- f. Earthquake prediction response plans should be developed, including procedures for protecting occupants of hazardous buildings, appropriate warning announcements and public education procedures, and other short-term preparations.
 - g. A program of public education and preparedness shall be a major, continuing component of the emergency preparedness program. It should include, at a minimum:
 1. The existence and approximate locations of local faults, possible fault branch areas, and the dam evacuation area;
 2. The potential for strong ground shaking in the area, and means of strengthening buildings and protecting furnishings, equipment and other building contents from damage;
 3. The need for businesses and residents to be self-sufficient for several days following an earthquake, including food, water, medical assistance, and limited fire fighting.
 - h. The cooperation of the business community should be enlisted for public education and mutual assistance. Businesses should develop their own disaster response plans and have provisions for food, water, first aid and shelter of employees who may not be able to return home for several days following a major earthquake.

6. PLANNING FOR POST-DISASTER RECOVERY

- a. A standing committee for disaster recovery shall be established prior to any disaster to provide contingency planning for the rapid and effective reconstruction of the City of Tehachapi following a disaster. The committee shall include representatives of the City

Council, Planning, Public Works, Economic Development, and Building and Safety policy functions, as well as liaison to the local utilities and any state and federal redevelopment, housing and/or reconstruction programs, and other functions, as necessary. The committee shall have review authority for all emergency activities in the City.

- b. The committee shall have the authority to order the emergency demolition of structures and facilities to protect life and property bypassing the normal procedures after an earthquake, or other disaster.
- c. The committee shall develop effective procedures for post-disaster damage assessment, as appropriate for:
 - 1. Obtaining state and federal disaster assistance;
 - 2. Obtaining the maximum allowable reimbursement for repair and reconstruction of public facilities;
 - 3. Determining the location and nature of damage as an immediate basis for specific recovery planning.
- d. The committee shall be charged with the overall review of damage patterns, and development of specific plans for post-disaster reconstruction, including programs for effective recovery of lifelines, housing, and the commercial viability of the community.
- e. The committee shall propose any changes in land use, lifelines, circulation, and architectural/landscape design within a reasonably short time after the disaster, to allow their early incorporation into post-disaster reconstruction.
- f. The committee shall develop and institute procedures for rapid determination of locations where significant damage is caused by inherent geologic or structural problems that must be corrected to prevent recurring damage (high hazard areas).
- g. Policies and procedures shall be instituted to facilitate the rapid repair and reconstruction of all facilities not designated as high hazard areas.
- h. Procedures shall be developed for obtaining appropriate professional review of the high hazard areas, along with specific recommendations for hazard mitigation.

- i. Guidelines shall be developed by the Disaster Recovery Committee, for the exercise of emergency authorities for such purposes as:
 1. Rapid designation of redevelopment area;
 2. Revision of land use, circulation and parking requirements, and institution of other programs for improving the community environment;
 3. Adaptation and institution of special programs for disaster recovery;
 4. Funding of disaster recovery measures; where damage could be repeated in aftershocks or in future disasters;
 5. Moratorium on reconstruction in any high-hazard areas where damage could be repeated in aftershocks or in future disasters;
 6. Upgrading of the building code;
 7. Establishment of Hazard Abatement Districts, as appropriate; and,
 8. Designation of sites for temporary housing (e.g., travel trailers and pre-fabricated construction) of householders made homeless in the disaster, in cooperation with the Disaster Housing Program of the Federal Emergency Management Agency.
- j. Solicit state and federal funds to implement the City's seismic safety programs as such revenues are available.

Adopted on October 18, 1995

CIRCULATION

ELEMENT

Adopted on October 18, 1999

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I. INTRODUCTION

Government Code Section 65302 (b) mandates that General Plans contain a Circulation Element consisting of the general location and extent of existing and proposed major thoroughfares, routes, terminals and facilities, all correlated with the Land Use Element of the General Plan.

Since Circulation Elements were first required in 1955, transportation technology and needs in California have changed greatly. This Circulation Element update emphasizes a balance between the reliance on personal automobiles with the development of a multimodal transportation system.

Currently Highway 58 provides regional east-west mobility between the San Joaquin Valley and the Mojave desert region, with connection to the greater Los Angeles county from Highway 14 in Mojave. Locally, Tehachapi Boulevard, Valley Boulevard, and Highline Road currently provide sub-regional east-west mobility to travelers in the Tehachapi Valley. Tucker Road, Curry Street, Dennison Road, Stueber Road and Willow Springs Road provide north-south mobility within the city limits and associated Sphere of Influence.

Tehachapi has several street issues that will be addressed in this Circulation Element. The lack of a local collector system to provide and ensure neighborhood-to-neighborhood connectivity, requires that travelers must often take arterials or collectors to visit other neighborhoods. An incomplete classified street system and incomplete street linkages resulting partially from the interface of urban and suburban parcelization often impair the efficient flow of traffic. The railroad, an important part of the city's circulation system, restricts north-south traffic flow and occasionally results in longer trips to cross town as convenient crossings are not always available.

A. BACKGROUND

Tehachapi's Circulation Element describes, evaluates and forecasts transportation system needs within the City. It has been prepared and coordinated with the Kern Council of Governments' (KernCOG) 1995 Southeast Kern County Transportation Study Final Report (Study), a comprehensive transportation study for the southeast portion of Kern County encompassing the areas of Tehachapi, Mojave, California City, Rosamond and Willow Springs. This study evaluated the existing, 2005 and 2020 circulation systems.

Traffic volumes and roadway capacities were found for existing conditions, 2005 and 2020. Any planned circulation system improvements that were expected to be constructed concurrently with the land use growth during this time period were assumed to exist. It should be noted that the assumption of the construction of these improvements at the time identified does not guarantee that these measures will be constructed at that time.

The Study will be implemented through an annual monitoring of traffic flow and growth by either the countywide Congestion Management Program or the Rosamond/Willow Springs Traffic Impact Fee (TIF) Program. Monitoring of the data collected pursuant to these programs will ensure that the needed improvements are anticipated, funded, and constructed to meet the actual traffic demands.

The Study is incorporated by reference. It determined that:

The KernCOG traffic model analysis for the land use assumed to occur by 2005 indicate(d) that the existing street system would be adequate to maintain an acceptable level of mobility, with LOS C (Level of Service C) being provided within the city and adjacent area of the county. The only circulation system modification planned is the redesignation of State Route 202 to Tucker Road between Valley Boulevard and Tehachapi Boulevard. Along this route, a two lane segment of Tucker Road is forecast to operate at LOS D/E, and a two lane segment of Valley Boulevard, between Tucker Road and Woodford-Tehachapi Road, is forecast to operate at LOS D.

By 2020, several area roadway segments are expected to operate with an unacceptable level of mobility. In the city of Tehachapi, several streets of concern were found. Route 202 west of Tucker Road has a traffic demand for four to six lanes but currently has only two. The potential Red Apple Road connection between Tucker Road and Golden Hills Blvd. has been discussed to relieve traffic flow, but the precise alignment of this connector has not been determined. Other areas of concern are along Anita Drive near the high school, and Tehachapi Boulevard in the downtown area. These roadway links are projected to carry traffic volumes in excess of the acceptable capacity limits. Anita Drive at Tehachapi High School and Tucker Road at SR 202 are both expected to operate at LOS F.

These circulation issues are expected to benefit from planned street improvements, including those which are listed in Table 1 and the new high school. The Study observed that "all proposed projects will create a better level of service in the subject roadway or on other area streets as traffic is diverted onto a newly created project road."

II. CIRCULATION GOALS AND POLICIES

The Circulation Plan provides for the transportation needs of the community. It implements a street system which provides a high level of mobility, efficiency, access, and safety for all modes and purposes of trips. These modes may include, but not be limited to, rail, automobiles, trucks, buses, bicycles and pedestrians.

The City's circulation system is an integral part of the overall land use planning for the City. It functions as a link between the Land Use Element and the Public Facilities Element by presenting road locations, alignments, and design criteria to serve existing and planned development. It also serves to unite local traffic needs with the regional transportation system.

The following goals and policies will ensure the siting and development of new facilities are coordinated with future population growth and provides a balanced mix of transportation resources to the community.

A. LAND USE AND CIRCULATION

Goal 1: Integrate the circulation system with citywide land use policies and the regional transportation system.

Policies

- a. The Circulation Element map (Figure 1) shall be implemented to provide the accessibility necessary to serve the specific land uses proposed by the Land Use Plan and regional travel needs.
- b. All street and roadway improvements shall be consistent with the Circulation Element of the General Plan.
- c. The Circulation Element shall be consistent with the Land Use Element.
- d. The City shall work with the adjacent Community Service Districts and Kern County to provide the maximum compatibility of adopted circulation plans.
- e. No development shall be approved unless it is found to be consistent with the policies of the Circulation Element.
- f. Capital improvement planning shall consider the KernCOG's 1995 Southeast Kern County Transportation Study Final Report recommendations T-1 through T-5 and A-7 through A-9 as shown in Table 1.
- g. There is assumed to be a potential significant environmental impact when any one of the following may occur:
 1. Predicted traffic volumes resulting from a proposed project, combined with existing and approved projects, would result in the Level of Service below LOS C for any street segment or intersection in the City or the Tehachapi Sphere of Influence.
 2. If a project may result in traffic increases by 500 vehicles per day, 100 trips during morning or evening peak traffic times, or by 25 percent of existing traffic. Potential impacts to nearby residential streets may vary significantly. In addition to using this guideline, professional judgment must be exercised in making the determination of significance.

Table 1
Recommended Improvement Strategies for 2020
Tehachapi Area

- T-1 Construct East-West Connection between Tucker Road and Golden Hills Blvd. to provide two travel lanes. Reduces future need to widen Tucker Road and Valley Boulevard to the east of Tucker Road. Improves circulation in the Golden Hills area. Provides emergency access to the Golden Hills area. (Responsible agency: Kern County)

- T-2 Widen and improve Valley Boulevard west to Golden Hills Blvd. and Tucker Road between Tehachapi Boulevard and Valley Boulevard to provide four travel lanes plus median. Provides increased capacity for Tucker Road and Valley Boulevard and portions of the County west of the City of Tehachapi. (Responsible agencies: City of Tehachapi, Kern County)

- T-3 Improve Tehachapi Boulevard to provide four travel lanes between Mill Street and Tucker Road. Downtown circulation is improved, thus reducing the impacts to adjacent residents. (Responsible agency: City of Tehachapi)

- T-4 Construct Dennison Road Interchange at Highway 58. Freeway access of the industrial/airport area is improved, allowing local traffic to use existing interchanges. (Responsible agencies: City of Tehachapi, Kern County, Caltrans)

- T-5 Construct segment of Mill Street across the railroad track to connect to Tehachapi Boulevard. Downtown circulation is improved, thus reducing the impacts to adjacent residents. (Responsible agency: City of Tehachapi)

- A-7 An option to extend Broome Road from the northern terminus of Woodford-Tehachapi Road to Highway 58 was evaluated to provide alternative commuter access and/or emergency access to the Golden Hills area of Tehachapi. It was determined not to be environmentally suitable, engineering feasible, or acceptable to the local residents to construct a two or four lane roadway in this area.

Pursue a preliminary feasibility and route alignment study for the Red Apple connector between Tucker Road and Golden Hills Blvd. Additionally, the precise alignment needs to be determined to protect the necessary right-of-way. This analysis should be coordinated with the City of Tehachapi, County of Kern, KernCOG, and the local residents that have expressed their interest in the alignment. (Responsible agency: City of Tehachapi, County of Kern, KernCOG)

- A-8 Pursue and develop an improvement funding program for the recommended improvements in the Tehachapi area. The Rosamond TIF program could be used as a model for this fee program. This fee program should be coordinated between the County of Kern and the City of Tehachapi. (Responsible agency: City of Tehachapi)

- A-9 Continue to develop and encourage school age children to carpool or ride a bus to school. The traffic model indicated that a significant number of vehicles are drawn to the school sites near Anita Drive and Dennison Road. Access to the schools should be coordinated to reduce the load on any given roadway. (Responsible agency: City of Tehachapi)

From Kern Council of Governments, Southeast Kern Transportation Study Final Report, January, 1995

3. Project access to a major road or arterial road would require a driveway that would create an unsafe situation or a new traffic signal or major revision to an existing traffic signal.
4. There is high level of bicycle or pedestrian activity in the vicinity of the project, and project traffic would create a hazard for them.
5. Driveway access to major activity centers is proposed closer than 200 feet to the adjacent intersection of a collector or arterial street, measured from the curb return to the nearest edge of the driveway.

If these thresholds are exceeded, completion of a traffic study, construction of intersection improvements, or other mitigation measures are required to reduce the impact below the level of significance. A traffic study may also be required to assess site-specific traffic circulation issues such as driveway locations and parking lot circulation, unusual or unsafe road design, or effects on pedestrian and bicycle circulation.

B. ROADWAY CLASSIFICATION, STANDARDS

Goal 2: Design standards which promote the efficiency and safety of the circulation system.

Policies

1. Circulation Element

- a. The Circulation Element shall determine the function of major streets. The City's functional street classification system shall include arterials, collectors, local collectors and local streets.

2. Arterial Streets

- a. Arterials serve as the principal network traffic flow. They typically have no less than a 100 foot right-of-way and connect areas of major traffic generation within the urban areas and connect with important county roads and state highways. They also provide for the distribution and collection of through traffic to and from collector and local streets serving residential, commercial, and industrial areas.
- b. The primary purpose of arterials is to carry traffic. Parking shall be prohibited on these streets, and eliminated where it now exists as traffic safety conditions warrant.
- c. Table 2 designates Tehachapi's arterial streets.

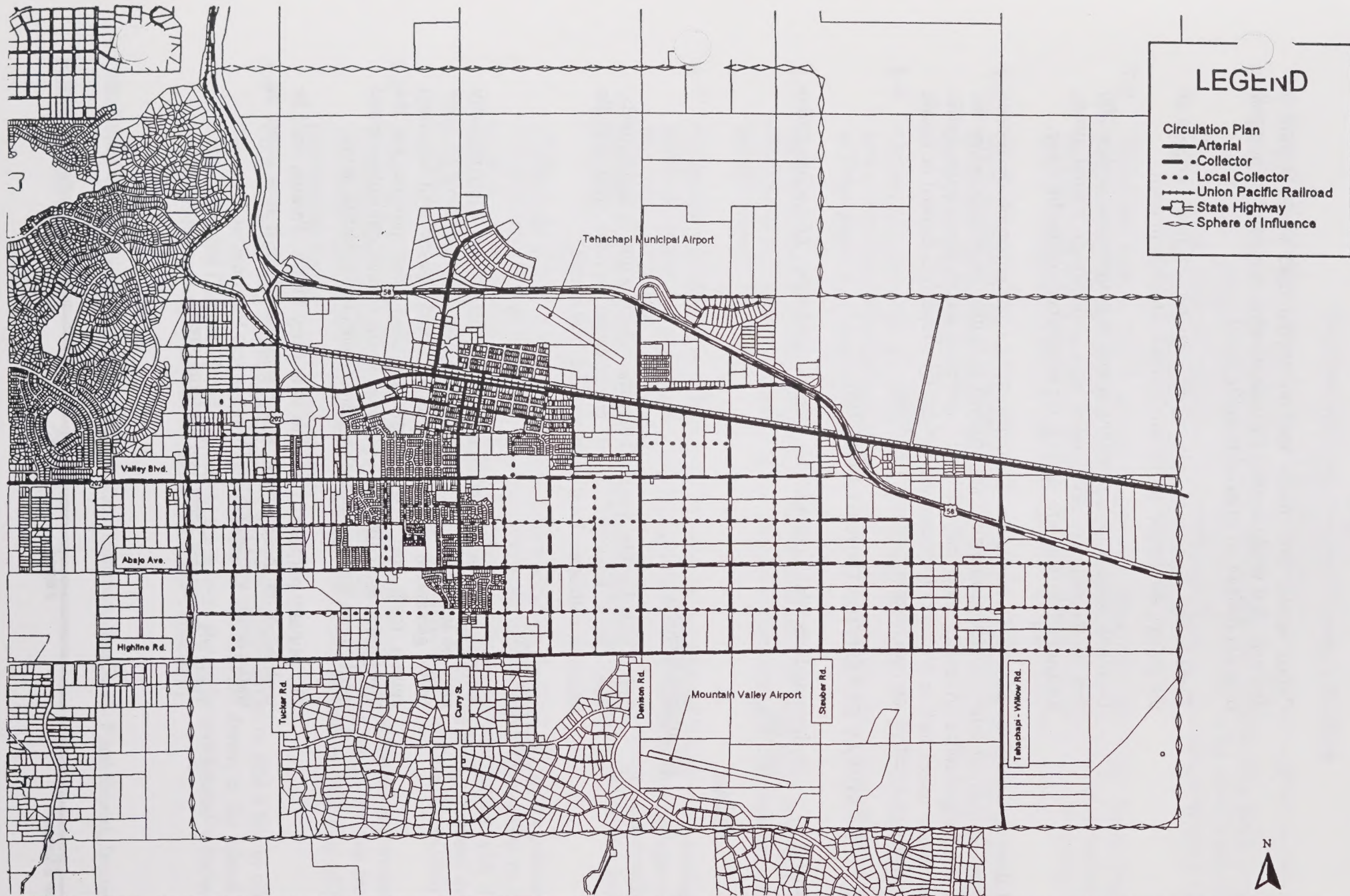


Table 2
Arterial Streets

East-West	Number of Lanes/ Cross Section*	Extent
Tehachapi Boulevard	4/CTL	Western Sphere of Influence to Dennison Road
Tehachapi Boulevard	4/median	Dennison Road to Eastern Sphere of Influence
Valley Boulevard	4/median	Western Sphere of Influence to Curry Road
Highline Road	4/medianWestern	Sphere of Influence to Tehachapi-Willow Springs Road
North-South		
Tucker Road	4/median	SR 58 to Highline Road
Mill Street/Capitol Way	4/median	Tehachapi Boulevard to Discovery
Curry Street	2/parking	Tehachapi Blvd to C Street
Curry Street	4/median	C Street to Highline Road
Dennison Road	4/median	SR 58 to Highline Road
Steuber Road	4/median	Tehachapi Blvd to Highline Road
Tehachapi-Willow Springs Road	4/median	Tehachapi Blvd to Highline Road
Tehachapi-Willow Springs Road	4/median	Highline Road to Sphere of Influence

*CTL = continuous left turn lane

Median = median island, no on-street parking

Parking = on street parking allowed

- d. Arterials at city gateways and arterial/arterial intersections shall be developed with not less than a 110 foot right-of-way for four to six travel lanes, a two-way left center turn lane or median and bike lanes. Other arterials shall be developed within the right-of-way to accommodate four travel lanes, bike lanes and a continuous left turn lane.
- e. Arterials shall be built in areas where traffic demand warrants the development of this facility to meet the adopted level of service.
- f. Arterial streets should be built at a typical separation of one mile.

3. Collector Streets

- a. Collector streets provide for traffic movement between arterial and local streets, traffic movement within and between neighborhoods and major activity centers, and limited direct access to abutting properties. They typically have an 86 foot right-of-way.
- b. Collectors are intended to connect arterials with local streets and activity centers.
- c. Table 3 designates Tehachapi's collector streets.

Table 3
Collector Streets

East-West	Number of Lanes/ Cross Section*	Extent
[1]H Street	2/parking	Mill Street to Hayes Street
E Street	2/parking	Mountain View to Hayes Street
Goodrick Drive	4/parking	Dennison Road to Steuber Road
Valley Boulevard	4/parking	Curry Street to Steuber Road
Pinon Street	4/parking	Reeves Avenue to Mid-Section 26 Road
White Oak Alignment Road	4/parking	Steuber Road to Mid-Section 26 Road
North-South		
Reeves	4/CTL	Highline Road to Red Apple Road
Green Street	2/parking	C Street to H Street
Wyman Street	4/CTL	Valley Boulevard to Highline Road
Mid-Section	274/CTL	Tehachapi Boulevard to Highline Road
Mid-Section	264/CTL	Highline to White Oak Alignment Road

*CTL = continuous left turn lane

Median = median island, no on-street parking

Parking = on street parking allowed

[1] H is used until Mill Street RR crossing is built until then H Street functions as an arterial.

- d. Collectors shall have a right-of-way to allow four lanes undivided and bike lanes or, where warrants permit, two lanes, bike lanes, a parking lane and a continuous left turn center lane.

- e. Collector streets are typically separated at approximately one-mile intervals centered between arterial streets and planned to intersect with other streets so as to maximize traffic safety and discourage fast flowing traffic through residential areas.
- f. Arterial and collector intersections shall form four leg, right angle intersections. Offset or skewed intersections of streets shall be avoided where possible.

4. Local Streets

- a. Local streets provide for direct access to abutting properties and for very localized traffic movements within residential, commercial and industrial areas.
- b. Local collectors are local streets designated to connect neighborhoods and designed to discourage through traffic. Table 4 designates Tehachapi's existing local collectors. Future local collectors are designated on Figure 1.

Table 4
Local Collectors

East-West	Number of Lanes/ Cross Section*	Extent
C Street	2/parking	Mill Street to Curry Street
Hayes Street	2/parking	Tehachapi Airport to E Street
Mountain View	2/parking	Tehachapi Boulevard to Valley Boulevard
Mill Street	2/parking	Tehachapi Boulevard to C Street
Anita Drive	2/parking	Snyder Avenue to Dennison Road
Snyder Avenue	2/parking	Anita Drive to Tehachapi Boulevard

*CTL = continuous left turn lane

Median = median island, no on-street parking

Parking = on street parking allowed

- c. Local street right-of-way shall be a minimum of 55 feet which allows two travel lanes and parking. Local collectors may be developed with a 60-foot right-of-way to include two travel lanes, and parking.
 - d. Local streets shall serve residential neighborhoods, and shall not be used to carry through traffic or high traffic volumes.
 - e. Local streets shall not carry an unreasonable level of through traffic. Should it be determined that a local street is carrying an unacceptable level of through traffic, the City may use appropriate means to reduce traffic through creation of one way traffic flow, installation of traffic diversion devices, and/or any other means deemed to be acceptable under the Vehicle Code of the State of California.
 - f. Permit design standards for local streets to reduce right-of-way width and paving where innovative approaches to street design are proposed within a planned development.
 - g. A minimum of 125 feet shall separate intersections of local streets with collectors or arterials.
- 4. Standards for new street development shall be consistent with the General Plan.
 - 5. Arterial, collector and local street standards shall be developed which provide adequate capacity for their appropriate function.
 - 6. The design and improvement of city streets shall be considered in the Capital Improvements Program, or implemented by new developers as conditions of approval.
 - 7. The City designates Level of Service C as defined in the Highway Capacity Manual (published by the Transportation Research Board of the National Research Council) as the minimum desirable service level at which arterial streets and collector streets should operate. All new facilities in these categories shall be designed to operate at this level or better for a period of at least 20 years following their construction.
 - 8. Upon City Council approval, and after consideration of KernCOG comments, LOS D at peak periods may be found to be an acceptable Level of Service for street segments or intersections where residences are not directly impacted and improvements to meet the City standard would be prohibitively costly or disruptive.
 - 9. The City may adopt Specific Alignment Plans when "standard equal-sided" widening is not adequate for future needs or when special conditions exist

which require a detailed implementation plan. The City shall adopt Specific Alignment Plans as a condition of approval of development proposals that affect the alignment. It shall be the responsibility of the applicant to justify the need for such plans.

10. Right-of-way essential to the circulation system should be dedicated and/or developed to the appropriate extent and width when development occurs.
11. City circulation system street alignments shall be coordinated with the KernCOG Regional Transportation Plan.
12. Kern County shall be encouraged to incorporate Tehachapi's Circulation Element into its Countywide General Plan, in particular for those areas within the Tehachapi Sphere of Influence.

C. MEDIAN BREAKS/DRIVEWAY STANDARDS

Goal 3: Median breaks and driveway standards shall be established for arterial, collector and local streets that have a direct effect on the performance of these roadways.

1. Arterial Street Standards
 - a. Driveway access to major activity centers should be located no closer than 300 feet to the adjacent intersection of a collector or arterial street, measured from the curb return to the nearest edge of the driveway. If driveways must be provided near intersections for facilities (such as service stations) these driveways shall not be accessible by median breaks and shall be located no less than 50 feet from the intersection measured from the curb return to the nearest edge of the driveway. If more than one is required to serve a property, the driveways shall be separated by 50 feet measured edge to edge, not centerline to centerline. Driveway operations shall be limited to right-in, right-out movements.
 - b. The distance between driveways along commercially developed arterials should not be less than 400 feet measured from centerline to centerline. Where this spacing is not practical, the development shall provide acceptable traffic mitigation measures in addition to those already required.
 - c. Where practical and desirable, driveways should be located on adjacent collector streets rather than on arterial streets.
 - d. Driveway consolidation shall be encouraged through joint access agreements along arterials.

- e. Full median breaks, where there is no adopted design, should provide access to collector streets and to major activity centers and should parallel the standards for driveways: not less than 200 feet from an adjacent intersection of an arterial or collector street, and not less than 1,000 feet between full median breaks.

2. Collector Street Standards

- a. Driveway access to major activity centers should be located no closer than 300 feet to the adjacent intersection of a collector or arterial street as measured from the curb return to the nearest edge of the driveway. If driveways must be provided near intersections for facilities (such as service stations) these driveways shall not be serviced by median breaks and shall be located no less than 50 feet from the intersection measured from the curb return to the edge of the driveway. If more than one is requested to serve a property, the driveways shall be separated by 50 feet, measured edge to edge, not centerline to centerline.
- b. The distance between driveways and intersecting local streets should not be less than 300 feet measured from the curb return to the nearest edge of the driveway. Where this spacing is not practical, the development shall provide acceptable traffic mitigation measures in addition to those already required.
- c. Driveways to residential property along collectors should be consolidated whenever possible.
- d. Medians on collectors shall be provided by concrete where left turn control is needed and by painted medians on two way left turn pockets where appropriate. Where concrete medians are provided, median breaks should be spaced not less than 300 feet apart.

D. ROADWAY IMPROVEMENTS

Goal 4: Protect rights-of-way for future street development.

Policies

- a. Adopt the official plan line process, as provided for in State Law, as the City's method of protecting rights-of-way for future street improvements.
- b. Establish official plan lines for all arterial and collector streets included in the Circulation Element of the General Plan.

- c. Public improvements required as condition of approval shall be constructed in accordance with the street classification shown in the Circulation Plan.

Goal 5: Maintain safe and efficient circulation routes for safety and emergency purposes.

Policies

- a. The Circulation Element shall be used to ensure efficient routes for emergency vehicles, including police, fire and other vehicles, when responding to calls for service. The length of single entry access routes shall be restricted.

Goal 6: Promote traffic safety throughout the City.

Policies

- a. Minimize hazardous encounters where transportation modes intersect.
- b. Encourage programs that will educate the public on bicycle, pedestrian, and vehicular safety.
- c. Design ingress and egress to shopping centers and employment centers to minimize traffic hazards.

Goal 7: Maximize the use of site planning techniques to improve traffic safety.

Policies

- a. Direct driveway access to collector streets from residential units shall be prohibited except where physical circumstances do not allow other design solutions.
- b. Left hand-turn lanes shall be provided where necessary for access from arterials into commercial or multi-family developments.
- c. Streets shall be designed in a manner that reduces through traffic on local streets and the number of intersections with collectors and arterials.
- d. Residential subdivisions shall be designed to encourage access from collector streets. Designated streets shall be designed to perform their role as local collectors.
- e. Promote design standards that allow for safe and efficient transport, delivery, loading and unloading of goods from service vehicles within commercial and industrial areas.

- f. Traffic impacts associated with development projects shall be mitigated to the Level of Service specified in the Circulation Element.
- g. Existing driveways, access points, and curb cuts along major arterials should be consolidated when development or a change in intensity of development takes place or when traffic operation or safety conditions warrant.
- h. Where arterials and collector streets are required, residential development shall be oriented away (side-on or rear-on) from such streets, and properly buffered so that the traffic carrying capacity on the street will be preserved and the residential environment protected from the adverse characteristics of the street.
- i. Due to the traffic congestion which results from numerous points of ingress and egress along commercial streets, future commercial developments or modifications to existing developments shall be master planned with limited points of ingress and egress onto a major street. Ingress and egress to shopping centers should be carefully designed in order to promote traffic safety. Left hand movements into and out of commercial areas should be minimized and existing points of ingress and egress shall be consolidated whenever possible.
- j. The long-term resolution of the regional transportation issues will require Tehachapi continue to participate with CalTrans, Kern County, and KernCOG to determine the solutions and funding for these problems. Until a regional solution is adopted by these parties, the City of Tehachapi shall require traffic impact studies for all development that is found to impact any street to below LOS C. The solutions will result in an operating Level of Service C.

Goal 8: Upgrade and maintain existing transportation corridors to meet urban safety standards.

Policies

- a. Encourage the development of improved signalization and intersection design.
- b. Use traffic control devices such as center medians and/or left turn pockets where appropriate.
- c. Provide adequate street lighting and traffic control devices throughout the City to ensure safe and efficient mobility.

- d. When feasible traffic signals shall be timed to facilitate the flow of through-traffic, thus enhancing the movement of vehicles and goods through the City while reducing fuel consumption and air pollution.
- e. The Capital Improvement Program shall be designed to achieve the Level of Service prescribed in the Circulation Element. Development impact fees shall be used to implement this policy where appropriate.
- f. The City shall give high priority to funding capital improvement projects which either complete links on the circulation system, relieve existing congestion, correct unsafe conditions on existing streets or improve the regional circulation system.

E. TRANSPORTATION SYSTEM MANAGEMENT

Goal 9: A balanced transportation system that considers the needs of all ages, many different modes of transportation and encourages a range of transportation opportunities that reduces the dependence upon personal automobiles.

Policies

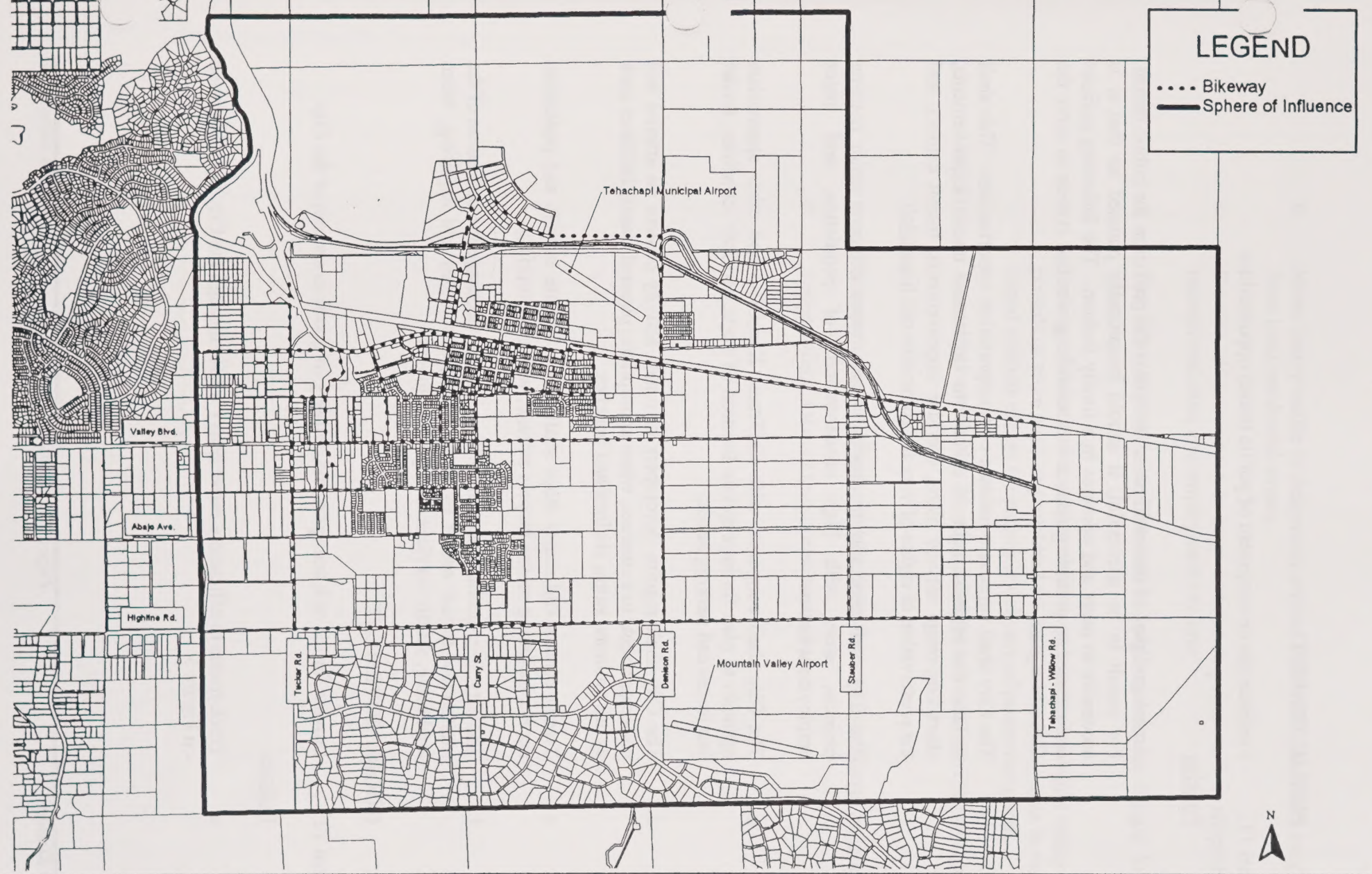
- a. The City shall encourage the reduction of total number of vehicle trips through development and implementation of a Transportation Demand Management (TDM) program. This may include, but shall not be limited to, site-specific peak-hour traffic-management plans, requirements for ride sharing, encouragement of ride sharing in the public and private sector and provision for park-and-ride facilities adjacent to the regional transportation system.
- b. Transportation System Management and Transportation Demand Management are the applicable strategies for the mitigation of traffic and parking congestion. Public transit, traffic management, ridesharing and parking management are to be used to the greatest extent practical to implement transportation management strategies.
- c. Promote the long-term shifting of peak hour commute trips from the single occupant automobile to ridesharing, buses, pedestrian, and bicycles.
- d. Large development, defined under policy 1.8.a, shall be encouraged to incorporate transit passenger facilities, bicycle racks or lockers, shower facilities, as well as on site services (dining, mail, banking, etc.) as ways to encourage alternative modes for commuter trips.

Goal 10: Accommodate multiple transportation modes throughout the City.

Policies

- a. Maintain and encourage safe and efficient pedestrian and bicycle circulation routes throughout the City.
- b. Rights-of-way considered for abandonment will be evaluated for use as bikeways and pedestrian paths and obtained when feasible.
- c. In order to provide a continuous and well integrated bikeway system linking public and private uses, the Bike Plan of the Circulation Element (Figure 2) designates streets intended for bikeways.
 - 1. Bike lanes are an on-street bikeway in which separate automobile and bicycle travel lanes are designed visually by signs and street markings. Bike lanes shall be implemented on new improved street or segments.
 - 2. Bike routes are a system of streets with signs denoting them as a bike route, warning motorists to anticipate bicycles on these streets and to indicating to bicyclists a desirable routing because of low traffic volumes or continuity to activity centers. Bike routes will be implemented on existing street segments.
 - 3. Bike paths have their own right-of-way and are developed exclusively for bicycle travel and are entirely separate from streets and highways.
- d. On-street parking shall be prohibited on all new or improved sections of major streets planned for bike lanes where adequate street width is not available to accommodate both on street parking and a bike lane.
- e. The provision of secure bicycle parking facilities shall be required as a condition of approval for all new major activity centers, public and private places of assembly, and commercial or industrial developments which must provide at least twenty parking spaces.
- f. State and federal funds earmarked for bicycle and transit improvements will be vigorously pursued and used.
- g. Sidewalks and appropriate crosswalks shall be required as conditions of development along all arterial and collector streets.
- h. All schools and other areas with significant pedestrian traffic shall include pedestrian and bicycle access. Whenever feasible, pedestrian paths should be developed to allow for unobstructed pedestrian flow from within a neighborhood.

- i. The City shall require curb, gutter, and sidewalks in all areas of the community to accommodate pedestrian traffic, especially along routes with high pedestrian traffic such as schools, parks, and the downtown area.
- j. Maintenance and construction of curb, gutter, and sidewalks shall be considered in Capital Improvement Plan in existing neighborhoods where they do not currently exist.
- k. Where walls or fences are proposed for residential developments along arterials or collector streets, pedestrian access will be provided between said street and the development to allow access to transit vehicles operating on the street.
- l. Street lighting is required within the rights-of-way of all public streets.
- m. Pedestrian signals are required as an integral part of the installation of traffic signals.
- n. Adequate on site off-street parking shall be required as a condition of approval for new development.
- o. The City shall maintain curb-use priorities that consider in descending order, the needs of through-traffic, short and long-term parking, transit stops, and passenger loading needs.
- p. Where walls or fences are proposed for residential developments along arterial or collector streets, pedestrian and bicycle access will be provided between the street and the development.
- q. Commercial centers shall be accessible by pedestrians from adjacent residential areas.



F. PUBLIC TRANSIT

Goal 11: Facilitate the development of public transit opportunities

Policies

- a. An integral part of the multimodal system is the provision for public transit. For transit to be successful, it should be properly planned so that it is accessible to users and operates in a timely fashion. The following policies are intended to provide guidance in establishing a transit system to serve the City and region.
- b. The City shall support a balance of transportation opportunities. This shall include the establishment of criteria to implement transit improvements, short/long-range service plans, corridor improvements, transit centers, and the preservation of rights-of-way for commuter-rail lines.
- c. The City shall cooperate to establish transit stops adjacent senior housing projects, areas with high concentrations of population, and major employment centers.
- c. The City shall cooperate with CalTrans, KernCOG and other appropriate agencies to plan for appropriate location of stops, services schedules, feeder bus routes and parking needs.
- d. The City shall require developers of major activity centers on arterial and collector streets to construct, when appropriate, planned transit facilities such as bus pullouts, stops, shelters and benches.
- e. Transit centers and major stops shall have adequate bicycle and pedestrian access, including secure bicycle storage, where appropriate.
- f. The City, in coordination with CalTrans, shall encourage the utilization of the multimodal transit center by coordinating bus routes and requiring, when applicable, shuttle services to major employers.

G. GOODS MOVEMENT

Goal 12: Provide for the safe transport and delivery of goods in and out of the City.

Policies

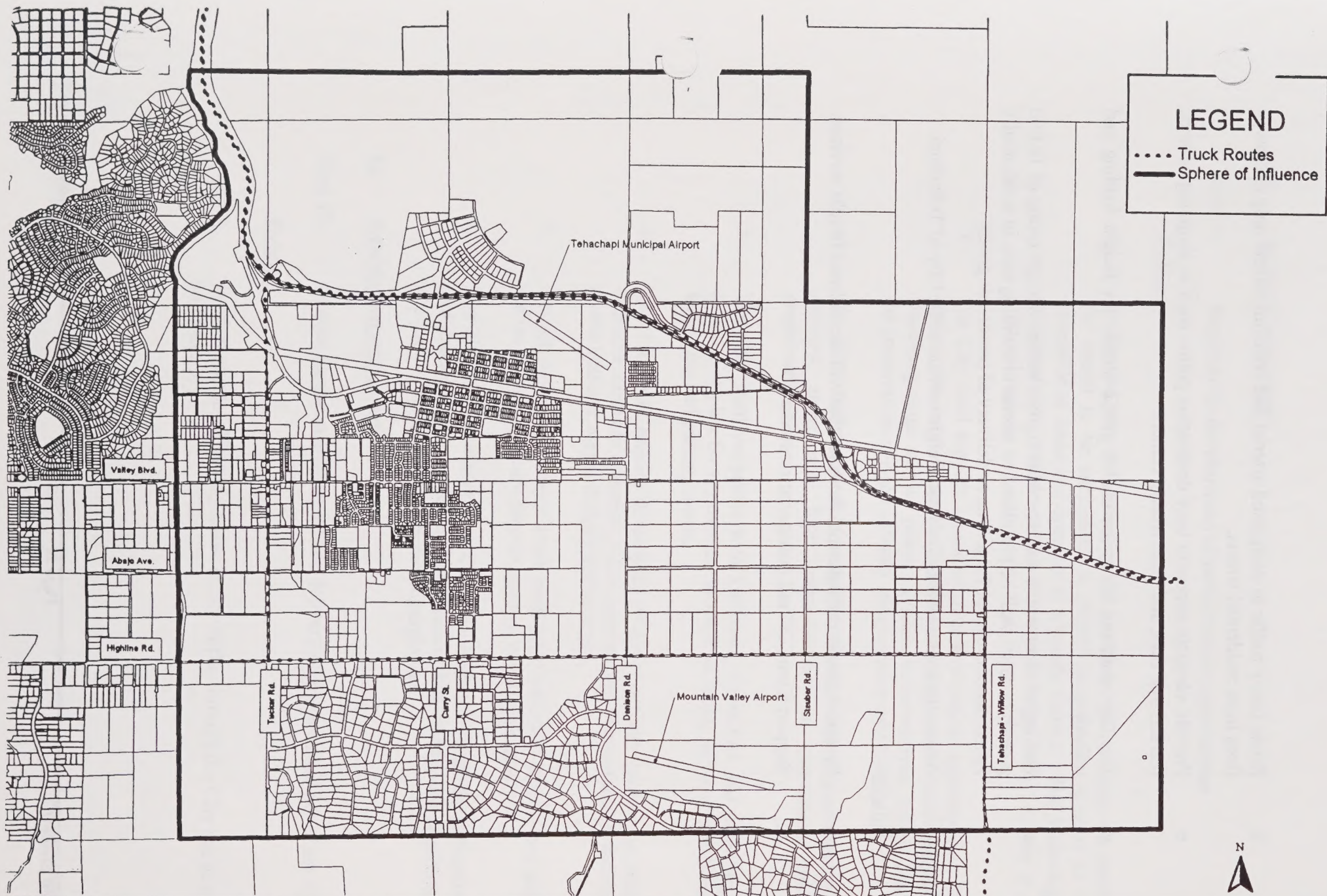
- a. Truck routes to efficiently move heavy traffic through the City are designated on Figure 3.

- b. Route heavy traffic to designated arterial and collector streets only and away from local residential streets.
- c. Provide adequate access to busy destination points such as shopping centers, recreational sites, and employment centers.
- d. The City shall not allow the use of public streets for freight loading and unloading.
- e. Parking of commercial vehicles with a gross vehicle weight rating of 10,000 pounds or more shall be prohibited on streets or building sites in residentially zoned districts except for pickup or delivery of persons or goods.

Goal 13: Assure the continuation of railroad freight service to the City of Tehachapi.

Policies

- a. Pursue expansion of industrial facilities that will use railroad freight services.
- b. Support KernCOG rail transportation studies.



HOUSING

ELEMENT



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1.1 PURPOSE OF ELEMENT

Requirements for Housing Elements are contained in Government Code Section 65580-65589, which are stated in the following section. The Housing Element is also subject to regulations established under the Health and Safety Code, and consists of standards and plans for the improvement of housing and the provision of suitable sites for housing. The Housing Element must also make provision for the housing needs of all economic segments of the community.

In recent years, attention has been focused on the high cost of housing. Younger families just entering the housing market are finding it more difficult to qualify for housing loans. Many of these families are paying in excess of 30 percent of their monthly income for housing. The high cost of housing also places a greater strain on those households with limited resources, especially single-parent households or senior citizens on fixed incomes.

One of the objectives of this Housing Element is to increase public awareness of the specific needs and problems of the community, as well as programs and incentives which will most effectively meet those needs. The adoption of this Housing Element, however, is only the first step toward providing suitable housing for the residents of the City of Tehachapi. Actual solutions to housing problems will only be achieved through a well coordinated effort among public officials and administration, private interests, such as lending institutions and developers, and citizens of the community.

1.2 AUTHORIZATION

In requiring the preparation of a Housing Element, Section 65583 of the Government Code states:

65583. The housing element shall consist of an identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, and scheduled programs for the preservation, improvement, and development of housing. The housing element shall identify adequate sites for housing, including rental housing, factory-built housing, and mobilehomes, and shall make adequate provision for the existing and projected needs of all economic segments of the community. The element shall contain all of the following:

(a) An assessment of housing needs and an inventory of resources and constraints relevant to the meeting of these needs. The assessment and inventory shall include the following:

(1) An analysis of population and employment trends and documentation of projections and a quantification of the locality's existing and projected housing needs for all income levels. These existing and projected needs shall include the locality's share of the regional housing need in accordance with Section 65584.

(2) An analysis and documentation of household characteristics, including level of payment compared to ability to

pay, housing characteristics, including overcrowding, and housing stock condition.

(3) An inventory of land suitable for residential development, including vacant sites and sites having potential for redevelopment, and an analysis of the relationship of zoning and public facilities and services to these sites.

(4) An analysis of potential and actual governmental constraints upon the maintenance, improvement, or development of housing for all income levels, including land use controls, building codes and their enforcement, site improvements, fees and other exactions required of developers, and local processing and permit procedures.

(5) An analysis of potential and actual nongovernmental constraints upon the maintenance, improvement, or development of housing for all income levels, including the availability of financing, the price of land, and the cost of construction.

(6) An analysis of any special housing needs, such as those of the handicapped, elderly, large families, farmworkers, families with female heads of households, and families and persons in need of emergency shelter.

(7) An analysis of opportunities for energy conservation with respect to residential development.

(8) An analysis of existing assisted housing developments that are eligible to change from low-income housing uses during the next 10 years due to termination of subsidy contracts, mortgage prepayment, or expiration of restrictions on use. "Assisted housing developments," for the purpose of this section, shall mean multifamily rental housing that receives governmental assistance under federal programs listed in subdivision (a) of Section 65863.10, state and local multifamily revenue bond programs, local redevelopment programs, the federal Community Development Block Grant Program, or local in-lieu fees. "Assisted housing developments" shall also include multifamily rental units that were developed pursuant to a local inclusionary housing program or used to qualify for a density bonus pursuant to Section 65916.

(A) The analysis shall include a listing of each development by project name and address, the type of governmental assistance received, the earliest possible date of change from low-income use and the total number of elderly and nonelderly units that could be lost from the locality's low-income housing stock in each year during the 10-year period. For purposes of state and federally funded projects, the analysis required by this subparagraph need only contain information available on a statewide basis.

(B) The analysis shall estimate the total cost of producing new rental housing that is comparable in size and rent levels, to replace the units that could change from low-income use, and an estimated cost of preserving the assisted housing developments. This cost analysis for replacement housing may be done aggregately for each five-year period and does not have to contain a project by project cost estimate.

(C) The analysis shall identify public and private nonprofit corporations known to the local government which have legal and managerial capacity to acquire and manage these housing developments.

(D) The analysis shall identify and consider the use of all federal, state, and local financing and subsidy programs which can be used to preserve, for lower income households, the assisted housing developments, identified in this paragraph, including, but not limited to, federal Community Development Block Grant Program funds, tax increment funds received by a redevelopment agency of the community, and administrative fees received by a housing authority operating within the community. In considering the use of these financing and subsidy programs, the analysis shall identify the amounts of funds under each available program which have not been legally obligated for other purposes and which could be available for use in preserving assisted housing developments.

(b) (1) A statement of the community's goals, quantified objectives, and policies relative to the maintenance, preservation, improvement, and development of housing.

(2) It is recognized that the total housing needs identified pursuant to subdivision (a) may exceed available resources and the community's ability to satisfy this need within the content of the general plan requirements outlined in Article 5 (commencing with Section 65300). Under these circumstances, the quantified objectives need not be identical to the total housing needs. The quantified objectives shall establish the maximum number of housing units by income category that can be constructed, rehabilitated, and conserved over a five-year time period.

(c) A program which sets forth a five-year schedule of actions the local government is undertaking or intends to undertake to implement the policies and achieve the goals and objectives of the housing element through the administration of land use and development controls, provision of regulatory concessions and incentives, and the utilization of appropriate federal and state financing and subsidy programs when available and the utilization of moneys in a Low and Moderate Income Housing Fund of an agency if the locality has established a redevelopment project area pursuant to the Community Redevelopment Law (Division 24 (commencing with Section 33000) of the Health and Safety Code). In order to make adequate provision for the housing needs of all economic segments of the community, the program shall do all of the following:

(1) Identify adequate sites which will be made available through appropriate zoning and development standards and with public services and facilities needed to facilitate and encourage the development of a variety of types of housing for all income levels, including multifamily rental housing, factory-built housing, mobilehomes, emergency shelters, and transitional housing in order to meet the community's housing goals as identified in subdivision (b). Where the inventory of sites, pursuant to paragraph (3) of subdivision (a), does not identify adequate sites to accommodate the need for groups of all household income levels pursuant to Section 65584, the program shall provide for sufficient sites with zoning that permits owner-occupied and rental multifamily residential use by right, including density and development standards that could accommodate and facilitate the feasibility of housing for very low and low-income households. For purposes of this paragraph, the phrase "use by right" shall mean the use does not require a conditional use permit, except when the

proposed project is a mixed-use project involving both commercial and residential uses. Use by right for all rental multifamily residential housing shall be provided in accordance with subdivision (f) of Section 65589.5.

(2) Assist in the development of adequate housing to meet the needs of low- and moderate-income households.

(3) Address and, where appropriate and legally possible, remove governmental constraints to the maintenance, improvement, and development of housing.

(4) Conserve and improve the condition of the existing affordable housing stock, which may include addressing ways to mitigate the loss of dwelling units demolished by public or private action.

(5) Promote housing opportunities for all persons regardless of race, religion, sex, marital status, ancestry, national origin, or color.

(6) (A) Preserve for lower income households the assisted housing developments identified pursuant to paragraph (8) of subdivision (a). The program for preservation of the assisted housing developments shall utilize, to the extent necessary, all available federal, state, and local financing and subsidy programs identified in paragraph (8) of subdivision (a), except where a community has other urgent needs for which alternative funding sources are not available. The program may include strategies that involve local regulation and technical assistance.

(B) The program shall include an identification of the agencies and officials responsible for the implementation of the various actions and the means by which consistency will be achieved with other general plan elements and community goals. The local government shall make a diligent effort to achieve public participation of all economic segments of the community in the development of the housing element, and the program shall describe this effort.

(d) The analysis and program for preserving assisted housing developments required by the amendments to this section enacted by the Statutes of 1989 shall be adopted as an amendment to the housing element by July 1, 1992.

(e) Failure of the department to review and report its findings pursuant to Section 65585 to the local government between July 1, 1992, and the next periodic review and revision required by Section 65588, concerning the housing element amendment required by the amendments to this section by the Statutes of 1989, shall not be used as a basis for allocation or denial of any housing assistance administered pursuant to Part 2 (commencing with Section 50400) of Division 31 of the Health and Safety Code.

(Amended by Stats. 1984, Ch. 1691, § 3, eff. Sept 30, 1984; Amended by Stats. 1986, Ch. 1383, § 2; Amended by Stats. 1989, Ch. 1140, § 2; Amended by Stats. 1989, Ch. 1451, §1.5; Amended by Stats. 1991, Ch. 730 (A.B. 1929), § 1; Amended by Stats. 1991, Ch. 889 (S.B. 1019), § 2.)

Note: Stats. 1984, Ch. 1691, also reads:

SEC. 1. The Legislature finds and declares that because of economic, physical, and mental conditions that are beyond their control, thousands of individuals and families in California are homeless. Churches, local governments, and nonprofit organizations providing assistance to the homeless have been overwhelmed by a new class of homeless: families with children, individuals with employable skills, and formerly middle-class families and individuals with long work histories.

The programs provided by the state, local, and federal governments, and by private institutions, have been unable to meet existing needs and further action is necessary. The Legislature finds and declares that two levels of housing assistance are needed: an emergency fund to supplement temporary shelter programs, and a fund to facilitate the preservation of existing housing and the creation of new housing units affordable to very low income households. It is in the public interest for the State of California to provide this assistance.

The Legislature further finds and declares that there is a need for more information on the numbers of homeless and the causes of homelessness, and for systematic exploration of more comprehensive solutions to the problem. Both local and state government have a role to play in identifying, understanding, and devising solutions to the problem of homelessness.

Note: Stats. 1986, Ch. 1383, also reads:

SEC. 3. The amendments to paragraph (1) of subdivision (c) of Section 65583 of the Government Code made by the act adding this section during the 1986 Regular Session of the Legislature shall require an identification of sites for emergency shelters and transitional housing by January 1, 1988, or by the next periodic review of a housing element pursuant to Section 65588 of the Government Code, whichever is later, in order to give local governments adequate time to plan for, and to assist in the development of, housing for homeless persons, if it is determined that there is a need for emergency shelter pursuant to paragraph (6) of subdivision (a) of Section 65583 of the Government Code.

Note: Stats. 1991, Ch. 889, also reads:

SEC. 5. The additional requirements and duties created by Sections 1, 2, and 4 of this act shall be applicable upon the next amendment or periodic review of the housing element by the legislative body.

1.3 PREPARATION

The preparation of the City of Tehachapi Housing Element can be described as a coordinated, continuing, and comprehensive effort. The key elements were coordination with civic leaders and public agencies, follow-up public meetings, a statistical analysis pertinent to Tehachapi, and finally, an integration of public response, statistical analysis, and programs available to assist needs of the community.

Following adoption of the Housing Element, the Planning Commission and City Council will continue to monitor the implementation of the plan.

1.4 RELATIONSHIP TO OTHER ELEMENTS AND PLANS

The California Government Code requires internal consistency among the various elements of a general plan. Section 65300.5 of the Government Code states that the General Plan and the parts and elements thereof shall comprise an integrated and internally consistent and compatible statement of policies. This updated and revised Housing Element is consistent with the other adopted elements of the Tehachapi General Plan Update.

The land use allocations contained in the Land Use Element are supportive of the policies and actions set forth herein and will provide adequate sites to accommodate projected new housing construction. Additionally, the Circulation Element proposes a transportation system which will provide adequate access to work centers, schools, shopping areas, and other destinations for both existing and future residents, while other elements of the General Plan relate to environmental quality, the preservation and the conservation of natural resources, and public health and safety. The plans and programs contained in the various elements establish opportunities and constraints for future residential development.

As such, the various policies and programs recommended throughout the General Plan were taken into account during the preparation of this Housing Element.

Although the Housing Element presents basic policies and actions for resolving a variety of local housing issues, its implementation is greatly achieved through the City's Zoning Ordinance, Subdivision Ordinance, Building Codes and Code Enforcement Program. A comprehensive housing program is not complete unless and until there is full coordination among these documents as well as between the public and private sectors.

The Executive Summary serves as a synopsis of the City of Tehachapi Housing Element. The Summary abbreviates a thorough data collection and analysis, as well as the methodology developed to identify the City's housing needs and specific programs to meet those needs. The primary areas of emphasis are, included in chapters: 3.0 - Community Profile; 4.0 - Housing Programs; 5.0 - Agency and Program Coordination; 6.0 - Housing Opportunities and Constraints; and 7.0 - Update and Evaluation.

This Housing Element is based on information that is available to the City of Tehachapi as of September 1992. At this date, only portions of the 1990 U.S. Census information are available and the accuracy of some portions are subject to debate. To the extent feasible, 1990 Census data has been included in this Element. For information not yet available, 1980 Census data has been utilized. As additional 1990 Census data becomes available, some conclusions of this Housing Element may require slight modification.

2.1 HOUSING NEED

The Housing Element provides policy and program direction to the fulfillment of unmet housing needs in the community. Generally, current housing needs are defined as the summation of combined criteria that represent unmet housing need which are not likely to be satisfied through the private market alone or by existing housing program commitments. For the City of Tehachapi, the current unmet housing need is categorized as follows:

- A. The number of dwellings that are substandard and in need of rehabilitation is 379 units, or less than fifteen (15%) percent of the total units in the City.
- B. The number of units that are substandard to the degree that they require replacement is 21 units, or less than one (1%) percent of the total units in the City.
- C. The number of units that are overcrowded (households with more than 1.01 persons per room) is 207 units, or eight (8%) percent of the total units in the City.
- D. The number of dwellings in which the occupants were paying a disproportionate share of their income for shelter in 1980 is 226 units, or an average of 15 (15%) percent of the total units in the City. Figures for 1990 are, as yet, unavailable.

An approximate 50 percent overlap exists with respect to units that are substandard, overcrowded, and/or occupied by households paying more than one third of their incomes for shelter. It is usually the case that most substandard housing is occupied by households with low and moderate incomes and that most of the households in a community paying more than 33 percent of their incomes for housing

also have low or moderate incomes. Thus, a high degree of overlap occurs between substandard units and overpayment. Another area of overlap occurs where overcrowded units are occupied by low and moderate income persons, and where many of a community's overcrowded units are in substandard condition. For Tehachapi, the current unmet need for low- and very low-income income units is 420 units.

A comprehensive assessment of the City's housing needs must include consideration of special needs of the community in addition to the quantifiable elements. A careful examination of housing characteristics in the City of Tehachapi points out the following special housing needs:

- A. Without substantial down payments, households earning less than \$26,000 per year generally cannot purchase existing housing within the community. This income level is equivalent to about 85 percent of the City's estimated 1990 median income. About 50 percent of the City's population have incomes below the \$30,000 level.
- B. A household must earn at least \$15,800 per year to afford the average two-bedroom rental in the City, in order not to pay in excess of 33 percent of its income for shelter. This income level is equivalent to about 51 percent of the estimated 1990 City median income.
- C. Senior citizens, the pre-retirement age group, singles and young couples will have difficulty in obtaining smaller rental or sales units at affordable prices.
- D. Large families will have difficulty securing larger rental or sales units at affordable prices.
- E. Housing units suitable to the special need of disabled and handicapped persons are not generally available within the community.

The criteria used to establish the current unmet housing need does not consider the dynamics of population growth and the operation of the housing market over time. A projection of future housing needs must calculate and include such factors as:

- A. Additional housing stock to accommodate population growth and the formation of new households.
- B. Additional housing stock to replace units removed by market operations and to provide for an acceptable vacancy rate in the community.

Housing demand projections for Tehachapi assume that the City will continue to attract retirees and that the major developments and proposed annexations will take place. As the local economy develops, younger families seeking more affordable housing will enter the marketplace.

Household size is expected to remain at 2.7 persons per household until 1996. The vacancy and demolition allowance includes "other" vacant units, and is expected to increase slightly, from 5 percent to 6 percent as the major new development proposals progress, and more single-family homes are developed within the expanding City limits. Therefore, the total number of additional units needed by 1996 is projected to be approximately 1,130 within the City and 3,800 for the Planning Area. This yields a demand for additional housing within the City of approximately 225 units per year over the 5-year period from 1991 to 1996. The Planning Area total is approximately 750 units per year.

Total housing need is determined by the summation of current housing needs and projected future demand, an estimation of additions to the housing supply, and a calculation of the extent to which anticipated demand will or will not meet the cumulative need. In the City of Tehachapi, the total housing need of families and individuals with very low incomes is about 247 units between 1991 and 1996, while housing needs of those low incomes is 173 units. The cumulative effects of supply and demand operations of the marketplace are expected to result in a sufficient supply of housing that is suitable to the pricing capabilities of all households.

Since a substantial part of the existing housing needs in the City are attributable to substandard housing, the extent to which these conditions can be upgraded over the next five year period will reduce unmet housing needs incrementally.

2.2 HOUSING PROGRAMS

The ultimate goal of the City in undertaking the preparation of a Housing Element is to provide an adequate supply of sound, affordable housing in a decent and safe environment for current and future residents of the City of Tehachapi. This Housing Program Section sets forth appropriate and achievable responses to the needs identified in the previous section. Chapter 4 specifies the goals, policies and programs intended to improve housing conditions in the City. Objectives are intended to provide an overall framework of guidance for efforts required to meet the City's housing goal. These objectives reflect the community's priorities at the present time and may be modified periodically to remain responsive to a changing community profile. A policy framework has been developed to guide decision-making and actions taken to meet the objectives. A series of specific program responses to the identified housing needs has been formulated within the framework set by the policy statements. These programs are intended to set forth the nature of activity for actions that the City of Tehachapi views as appropriate to its needs and priorities.

2.3 AGENCY AND PROGRAM COORDINATION

Chapter 5 of this Element outlines the activities and responsibilities of the various governmental agencies (along with

private entities) whose input and cooperation are essential to the implementation of the Housing Element.

A critical factor of coordination efforts at the local level is insurance that programs proposed in this document are consistent with the overall General Plan for the community. During the preparation of this document, all existing plans were reviewed in an effort to maximize consistency with relevant goals and objectives.

2.4 HOUSING OPPORTUNITIES AND CONSTRAINTS

The ability of a community to provide suitable housing to meet the needs of residents from all economic segments is largely dependent upon opportunities within the community which are adaptable for the development of housing. Primary considerations in assessing opportunities for housing includes: (1) the availability of land for residential development; (2) the community's ability to provide adequate public services and infrastructure to the sites; (3) market and governmental constraints upon the provision of housing; (4) public perceptions relative to housing issues in the community; and (5) plans and standards for the development of housing in the City.

A survey of existing land use was undertaken to determine whether sufficient vacant, residentially zoned land is within the City limits to meet the projected housing needs through 1996. The results of the land use survey indicate that the Planning Area has over 1,250 acres of suitably vacant land which at an average of four dwelling units per acre could accommodate approximately 5,000 new dwelling units. These figures indicate that Tehachapi's 1996 housing demand can be met with the available vacant land within the Planning Area limits.

The ability and willingness of the community to provide adequate public services and infrastructure to new housing development is an important element in meeting future housing needs. Table 2-1 serves as a comprehensive overview of all utilities and public services in the City of Tehachapi, and sets the tone for possibilities of future development in the area.

Attempts to provide housing to all segments of the community can encounter prohibitive constraints. Generally, these constraints can be overcome or coordinated with program alternatives. In order to maximize positive changes, it is essential that potential constraints are identified and investigated so that appropriate solutions can be applied. For the purpose of this Housing Element, constraints relative to housing conditions have been categorized as market constraints, governmental constraints and public perception constraints.

TABLE 2-1
UTILITIES AND SERVICES AVAILABILITY
City of Tehachapi
1990

<u>SERVICE</u>	<u>AGENCY</u>	<u>EXISTING CAPACITY</u>	<u>FUTURE CAPACITY</u>	<u>LIMITATIONS</u>
DOMESTIC WATER	Tehachapi-Cummings County Water District; Kern County Water District	1989 use: 1425 acre-feet (excluding agricultural use)	5,500 AFY Groundwater 15,000 AFY State water municipal use (when available)	Water pressure; reservoir capacity
WASTEWATER TREATMENT	City of Tehachapi	.85 million gallons per day (MGD)	Planned expansion to 1.25 MGD permits 12,500- 14,500 population	Availability of effluent discharge sites.
SOLID WASTE	City of Tehachapi; Kern County Public Works Department	Landfill site located 5 miles east on Highway 58	Scheduled for closure July 1998.	No plans for expansion
EDUCATION	Tehachapi Unified School District	4 elementary schools, 1 junior high, 1 continuation high school, and 1 high school	Enrollment is approaching capacity; expansion will be required	
PARKS AND RECREATION	Tehachapi Parks and Recreation District	-2 City parks -2 ball fields -Indoor pool -Britte Valley Lake	See Land Use and Open Space Elements	

TABLE 2-1, CONTINUED
UTILITIES AND SERVICES AVAILABILITY

<u>SERVICE</u>	<u>AGENCY</u>	<u>EXISTING CAPACITY</u>	<u>FUTURE CAPACITY</u>	<u>LIMITATIONS</u>
POLICE	Kern County Sheriff	7 line officers 4 patrol cars 3 minute maximum response time low crime rate	Level of service can extend to 1996 with expansion; potential re-establishment of Tehachapi Police Department	\$1.2 - 1.5 million cost to re-establish
FIRE	Kern County Fire Department; Tehachapi Volunteer Fire Department	2-3 minute response time 3 firefighters 12-16 volunteer members less than a minute response time	Level of service can extend to 1996 with expansion	Response time limited by railroad crossing
HEALTH CARE	Tehachapi Valley Hospital District	28 bed acute-care general hospital 3 doctors residing within City Local ambulance service	Currently evaluating methods to finance new hospital	
STREETS	City of Tehachapi Public Works Department	Voluntary Installation of curbs and gutters	Adequate through 1996	Street expansion and installation of curb and gutter needed in northern portion of City near Southern Pacific Railroad

2.4.1 Market Constraints

Market constraints in the City of Tehachapi include high interest rates, inflation, labor shortages, and other economic variables. The following items are of concern in meeting the identifiable housing needs in the City:

- A. Insufficient family income prevents the financing of home improvements to units needing major rehabilitation (4% of existing units) and minor rehabilitation (13% of existing units).
- B. Many residents of Tehachapi, especially the elderly, qualify for rent subsidy programs, but are unaware of the types of assistance available.
- C. Location and development costs while diminishing, still limit the City's options for expanding its industrial base; therefore, a portion of the City will continue to be dependent upon commuters and retirees for future population increase.
- D. The costs of borrowing money discourage many persons from initiating home improvements or buying a new home.
- E. The rising costs of construction have made the building of low-income housing difficult without state or federal financial assistance.

2.4.2 Governmental Constraints

Governmental constraints such as land use plans, zoning regulations and governmental procedures are more easily changed than market or public perception constraints. The following items have been identified as constraints to housing development in Tehachapi:

- A. Subdivision development in outlying areas has been slowed by environmental constraints and the difficulty of providing new public services to these areas.
- B. Water costs are high because water from the California Aqueduct system is imported, as needed, to supplement local groundwater.
- C. Costs associated with lower density housing tend to limit the development of low-income housing.
- D. The opportunity to provide housing for low- and moderate-income households through the Article 34 referendum is not available to Tehachapi because this referendum has not been presented to City voters. Passage of an Article 34 referendum would permit the City to develop, construct or acquire low rent housing projects. In localities, such as Tehachapi, where the voters have not approved publicly-owned or publicly-developed low-rent housing under provisions of the State

Constitution (Article 34), Section 8 housing may be undertaken, but by private developers only.

2.4.3 Infrastructure Constraints

The City of Tehachapi places few constraints on development of housing. A major constraint to the expansion of the housing supply is infrastructure deficiencies. The City does not have sufficient reserve funds to construct streets and other infrastructure to serve outlying areas but has expended funds to construct new sewer treatment facilities, sewer trunk lines, water trunk lines and a new 1,500,000 gallon reservoir and water well. Forty acres of land are designated for medium density residential development that are adjacent to both sewer and water lines and can accommodate new development. Adequate streets are not currently available to this area. The remaining areas that are designated for medium and high density development are outside the existing developed area of the City and therefore will require the extension of sewer and water lines. One of the primary areas that is expected to provide new medium and high density development is within the Nunes Ranch area in Section 28. This area is currently cultivated farmland; therefore, the conversion from agricultural uses to residential development is also a constraint to development. Farmland conversion is of concern to the State Department of Conservation. The City is currently working to develop a funding source to provide sewer to this area.

Additional constraints to new development are a result of the Congestion Management Plan which requires the City to maintain at least a Level Of Service (LOS) E on State Route 202, and the Circulation Element of the City that requires an LOS C. Currently, some segments of State Route 202 are operating at LOS F and other streets are approaching LOS C or lower. Traffic improvements including street widening and signals are required to maintain efficient traffic flow and air quality; therefore, traffic mitigation may create some constraints to residential development.

The lack of drainage facilities throughout the City may be considered a constraint to development. Currently no drainage facilities are available to serve areas proposed for medium and high density development. A failure to construct these improvements will lead to damage of streets, unsafe conditions for motorists and property damage to land downstream of new residential areas.

The drought conditions in the state may be considered a constraint to development. For new development to take place in the City it is necessary to import water from the Feather River Project. Various competing interests may affect this water supply. In addition, the regulations of the State Department Of Health Services will result in a need to construct a water treatment plant to bring this new water source up to the standards established by Title 22 for domestic drinking water.

The various regulatory mandates and funding priorities create constraints to development of new housing at the lowest possible cost. The City has been severely impacted by the construction of housing without mitigation and has been required to expend millions of dollars to develop infrastructure. The City currently operates under a principle of providing infrastructure and allowing the development market to provide housing as the market demands.

The City does support the construction of new housing but must also satisfy the requirements of Caltrans, the Congestion Management Agency, the California Regional Water Quality Control Board and private landowners who may be affected by development. These other mandates may be considered as a constraint to new development when expenditures are required to mitigate the significant impacts that construction of housing may create.

2.4.4 Public Perception Constraints

Public perceptions of housing issues may constitute constraints to the development of housing that meets the needs of varying income groups as follows:

- A. Some residents may be unaware of the availability of programs designed to assist them in improving their existing dwellings or in finding sound housing at an affordable price.
- B. Some residents may be resistant to participating in federally-sponsored programs which involve direct government participation in the provision of housing and preempt local control of meeting housing needs.

Although certain governmental, market and public perception constraints should be modified or eliminated to facilitate development, opportunities available to the local government could, if utilized properly, stimulate development in general, or at least maximize development potential.

One such development opportunity is the utilization of energy conservation measures in new housing development or rehabilitation. To encourage incorporation of energy saving devices in area housing, the City participates in an energy conservation library program in conjunction with the County Planning and Development Services Department.

2.4.5 Housing Opportunities

As part of the Housing Programs component of this Element, the City will establish a program to identify incentives that meet its comprehensive housing, land use, planning and fiscal needs, as required.

Housing plans and specification are subject to requirements imposed by the City and/or County. Additional requirements may be imposed

when funding is provided by such public agencies as the Department of Housing and Urban Development (HUD) and the Farmers Home Administration (FmHA). Standards set forth by both HUD and FmHA are included in Chapter 6 of this document.

2.5 REGIONAL HOUSING ALLOCATION PLAN

In accordance with Assembly Bill 2853, the Kern Council of Governments (Kern COG) prepared a Regional Housing Allocation Plan. This plan discusses, on a regional basis, the projected housing needs of all economic segments of the population within the five market areas of the County. To determine need on a regional basis, the plan considers six major factors: market demand, employment opportunities, availability of suitable sites and public facilities, type and tenure of housing need, and the housing need of farm workers. As stipulated in the law, the plan seeks to avoid the impact of distributing housing in localities with relatively high proportions of lower income households. Only portions of the Tehachapi Planning Area (which includes the City of Tehachapi) are included in this Plan.

2.6 ELEMENT UPDATE

The State Department of Housing and Community Development recommends revision of the Housing Element at least every 5 years. By monitoring program implementation and changes in housing conditions on a yearly basis, the planning staff will be able to accurately advise the City Council of the need for update of the Housing Element when significant changes warrant. The update process for this Element will exceed three years and is a very costly process that precludes implementation of this and other Elements of the General Plan.

To evaluate the effectiveness of the selected programs in the Housing Element, the City should consider factors such as the following: (1) acceptability and adaptability to the local situation; (2) current level and availability of funding; (3) changing community needs and priorities; (4) changing priority for use of City staff and funds; (5) changes in the housing market; (6) and the availability of new federal, state or locally administered programs. Citizen participation is also an important element in maintaining a desirable level of responsiveness within the community.

This document includes a sample form designed to assist in the annual review of the programs identified in the Housing Element. The form sets forth a "bookkeeping" approach to monitoring building activity on a regular basis, thereby eliminating the need for additional staff or expanded departmental budget for updating the Element.

2.7 ENVIRONMENTAL REVIEW

The Housing Element is subject to the California Environmental Quality Act (CEQA) of 1970, as amended, which established environmental review requirements and procedures. The purpose of environmental review is to ensure consideration of environmental issues and, where appropriate and feasible, to include measures that reduce or eliminate potentially detrimental effects that may result from this governmental action. The Environmental Impact Report (EIR) for the General Plan Update will contain a review of the environmental impacts brought about by the adoption and implementation of the Housing Element.

It is anticipated that the General Plan EIR will find the proposed Housing Element potentially to have a significant adverse effect on the environment. However, with inclusion of the mitigation measures as proposed, limited significant effects are anticipated from implementation of the Housing Element.

The Housing Element will have little direct impact on the physical and socioeconomic environment. If the programs of the Housing Element are successful, the impacts experienced will be primarily beneficial. The secondary impacts that do occur will result from the increase in housing units that normally would not be developed without the impetus of, and programs suggested within, the Housing Element. It is expected that continued development of housing in the City could result in financial problems, including bankruptcy for existing properties. This is evidenced by the fact that most of the existing high density housing is managed by banks and other receivers following bankruptcy of previous owners. This is a direct result of the vacancy of units due to a lack of jobs in the area.

The mitigation measures described generally result from existing review requirements for individual projects and current local, state and federal programs. Based upon the potential impacts and appropriate mitigation measures described, the recommended finding is that, with inclusion of the mitigation measures, limited significant impacts are anticipated from the adoption of the proposed Housing Element.

2.8 EVALUATION OF EXISTING HOUSING ELEMENT

2.8.1 Progress in Implementation

The 1984 Housing Element projected that approximately 2,000 housing units would be needed in Tehachapi to accommodate projected household growth. By 1990, 2,430 units had been constructed. As shown in Table 3-7, 1,618 single-family houses, 653 multi-family units and 159 mobile-homes had been added to the housing inventory. No apartment units have been converted to condominiums. It appears the City has met the projected need for total housing units set forth in the 1984 Housing Element.

2.8.2 Effectiveness of the Element

Over the past eight years, housing prices in the Tehachapi area have increased significantly, making it increasingly difficult for the City to meet affordable housing needs. Some of the previous Housing Element's programs were not carried through, in part because demand for the programs was not demonstrated. However, the community is moving toward requiring additional low-income and senior housing through revisions and additions to housing programs included in the Housing Element Update.

2.8.3 Appropriateness of Goals, Policies, and Actions

It appears the previous Housing Element lacked policies that could be implemented effectively. This Element attempts to provide each policy with a realistic action that clearly indicates the responsible agency, timeframe, and funding source for implementation. Incentives for the production of affordable housing have been included in this Element's objectives. The previous Element did not provide enough direction for providing affordable housing, and the City was not fully prepared to address the issue.

The major objective of the Housing Element is to make adequate provisions for the housing needs of all economic segments of the community. It is essential, therefore, that an accurate profile of the community is developed so that housing needs may be identified. This chapter provides a statistical and socioeconomic analysis of conditions and opportunities in the community.

The sources of a majority of the data within this chapter were the U.S. Bureau of the Census and the California State Department of Finance. The chapter is prefaced by a section on geographic setting and background. Other sections fit into the categories of:

- A. People, including data on population, age distribution, ethnicity, etc.;
- B. Houses, including housing inventory and housing cost, building permit history, etc.; and
- C. Household characteristics, including household size and inventory, overcrowding, overpayment for shelter, etc.

Housing needs are ultimately determined through a consideration of current and projected needs, and special needs of the community. Current programs presently helping to meet housing needs are considered. An overall assessment of these conditions results in the total unmet housing need of the community.

3.1 GEOGRAPHIC SETTING

The City of Tehachapi is located in the mountainous region of south Kern County. The Tehachapi area is bordered on the north by the Sierra Nevada Mountains, on the east by the Mojave Desert, and on the south and west by the Tehachapi Mountains. The climate in the area is continental, with the surrounding mountains providing more distinct seasonal changes than are evident in other parts of southern California. The average annual precipitation is 10 inches, with a majority of this falling between November and April.

The Western Development Company of the Southern Pacific Railroad originally subdivided Tehachapi, an area adjacent to their tracks. When the City incorporated in 1909, the majority of its population derived their livelihoods from the railroad, cattle ranching, mining, or providing services to the former groups. Presently, the economic development in Tehachapi is closely associated with the cement plants east of the City. A number of persons residing in Tehachapi are employed at the California Correctional Institution in Cummings Valley. The large ranch properties around the City of Tehachapi were subdivided in the early 1960's and sold as second-home sites, retirement homes, and recreation areas.

3.2 POPULATION CHARACTERISTICS

To effectively address and identify existing and future housing needs for the City of Tehachapi, population variables such as demographic and socioeconomic characteristics and trends must be analyzed. The Community Profile is based on available data from U.S. Census reports, Kern County Council of Governments (Kern COG), and various other informational sources.

3.2.1 Population Trends

The City of Tehachapi was incorporated as a General Law city in 1909. Since incorporation, the City has grown from approximately 385 people in 1909 to a population of 6,504 as reported in the 1992 State Department of Finance (DOF) report. Although a decrease in population occurred from 1970 to 1980, the latest data obtained from the U.S. Census Bureau indicated that Tehachapi's 1990 population was 6,182 (see Table 3-1). This figure represents a 49.8 percent increase from 1980 to 1990. Factors that have fostered this growth in the 1980's include the City's proximity to the employment centers of the San Joaquin Valley and the Antelope Valley, the direct freeway access of Highway 58, and the attractiveness of Tehachapi's rural atmosphere.

Since 1980, the Tehachapi Planning Area has increased by 11,228 persons from 8,872 to 20,100 as of March 1987. Kern COG calculations indicate 25,902 according to 1990 U.S. Census counts. The Tehachapi Planning Area includes Census Tracts 60 and 61 and the incorporated City of Tehachapi, as indicated on Figure 3-1. The total population also includes the 5,000 prison inmate population of the California Correctional Institution (CCI), which has significantly increased since 1985. This population figure indicates a nearly 200 percent increase in ten years, an average of 19.2 percent annual growth rate during the 1980-1990 period. According to regional planning estimates, the Tehachapi area population increased by 12,030 persons during this period, excluding the inmate population.

In recent years, Tehachapi has experienced commercial and employment growth in both the City and the immediate vicinity. This has prompted increased residential growth at impressive rates since 1980. The economic surge is expected to facilitate a consistent population growth pattern through the year 2010.

Much of the recent development activity focused on the outlying areas surrounding the City of Tehachapi as several large ranches were subdivided and resort communities were established. Metropolitan-based families sought second homes and local residents moved into new housing areas in Golden Hills, Stallion Springs, Bear Valley Springs and other areas outside the City limits.

While the figures presented above address total population, the demand for housing is best measured by the number of households within a community. A household, as defined by the Bureau of the

Table 3-1
POPULATION OF TEHACHAPI
1940-1990

Year	Population
1940	1,264
1950	1,685
1960	3,161
1970	4,211
1980	4,126
1990	5,971
1996 (projected)	9,275
2010 (projected)	17,000

Source: U.S. Bureau of the Census, 1990

KERN COUNTY 1990 CENSUS TRACTS

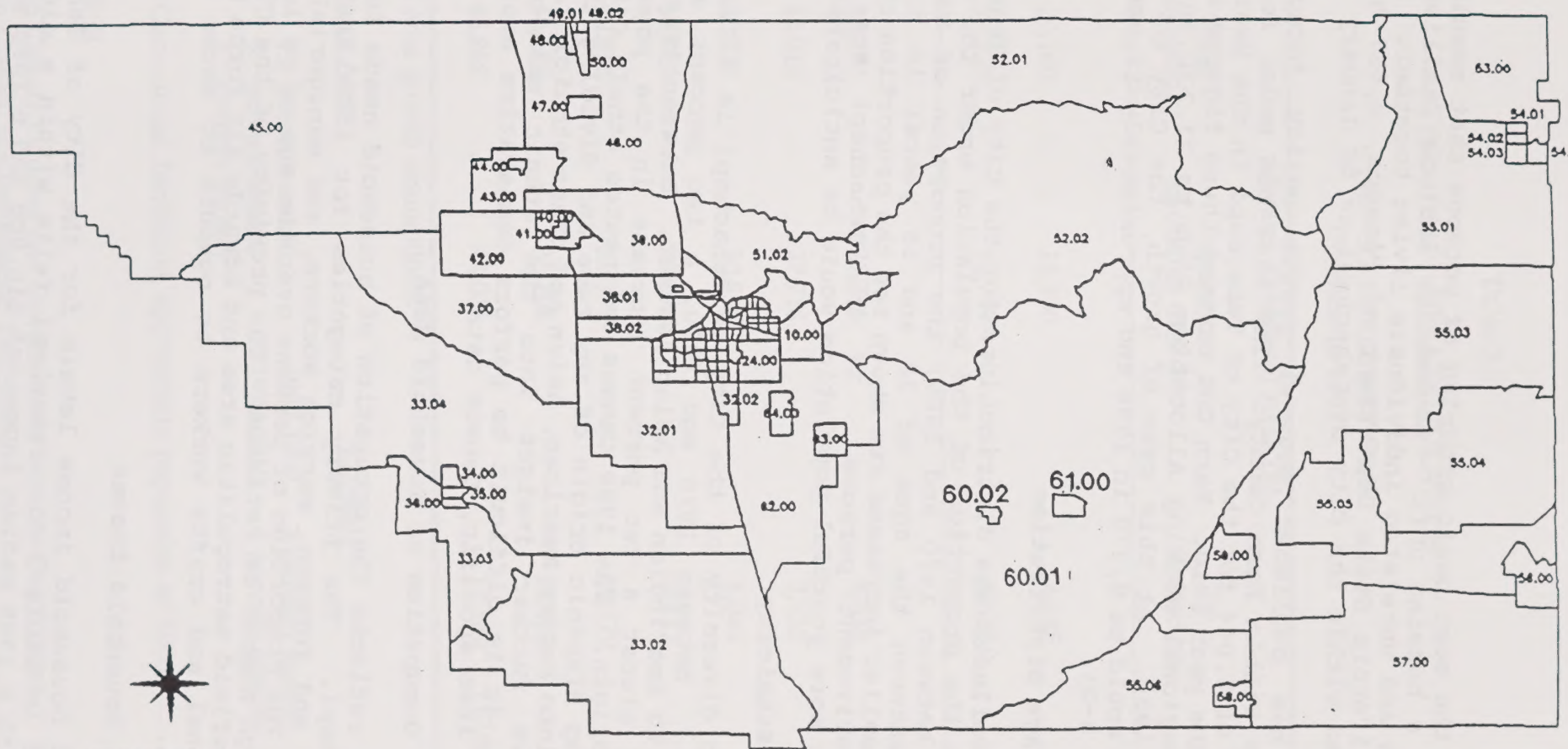
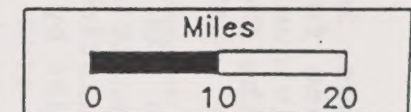


FIGURE 3.1

Prepared by Kern Council of Governments

SOURCE: U.S. Census Bureau

wg



Census, is the most basic grouping of persons that results in the demand for a housing unit. Households include families, single individuals and unrelated individuals living together. According to the California State Department of Finance, 2,587 households were located within the City of Tehachapi as of January 1, 1990.

Kern COG has published several growth policy forecasts for communities within Kern County. The 1987 COG model forecasts a population of 8,044 for the City of Tehachapi in the year 2000 and 12,384 by the year 2010. Kern COG revised these figures as part of the 1990 Regional Housing Allocation Plan to 21,376 in 1989 and 39,690 in 1996. At this rate of growth, the City of Tehachapi population would be 9,275 in 1996 and approximately 17,000 in 2010. (See Table 3-2).

3.2.2 Age Distribution

Table 3-3 reflects age distributions for the City of Tehachapi and shows that the proportion of the population under the age of 18 decreased between 1970 and 1980; the proportion of working age persons (between the ages of 18 and 55 years) is increasing. Somewhat smaller increases are shown for the proportion of retirees and pre-retirement persons. If the Tehachapi area develops rapidly, a more youthful population would be anticipated.

3.2.3 Ethnicity

The ethnic diversity of the City of Tehachapi is illustrated in Table 3-4. Between 1970 and 1980, a two percent shift from Caucasian to Amerindian and Asian descent. Between 1980 and 1990, there was almost a two percent increase in the population of Hispanic origin. The 1990 Census delineates ethnic diversity by identifying Hispanic origin of any race and dividing the "other" category into Native American, Asian and other ethnicity. Although this gives further insight into the ethnic make-up of the community, it is difficult to perform comparative analysis with previous, less specific, Census data.

3.2.4 Occupation of Household Head

Table 3-5 reflects the occupation of household heads for the City of Tehachapi. The primary categories for 1990 are retirees, craftsmen and foremen, service workers, and managerial/technical workers. The proportion of persons over the age of 55 is reflected in the high number of retirees. The proximity of the City to both the Bakersfield metropolitan area and Edwards Air Force Base allows professional and crafts workers to commute to those areas from Tehachapi.

3.2.5 Household Income

Estimated household income levels for the City of Tehachapi are reflected in Table 3-6. Tehachapi falls within a middle income level with a 1969 median income of \$10,000 and a 1980 median level

Table 3-2

TEHACHAPI AREA POPULATION

1987 COG PROJECTIONS
(Revised in 1991)

Greater Tehachapi Area (a)			
Year	Total Population	Population Excluding CCI (b)	City of Tehachapi
Historical			
1987	20,100	15,100	4,645
1990	23,759	18,759	5,652
Forecast			
1993	26,791	21,716	6,358
1998	32,919	27,716	7,735
2000	35,811	30,556	8,044
2003	38,729	33,390	9,411
2005	40,811	35,390	10,179
2008	44,178	38,708	11,450
2010	46,868	41,065	12,384 (17,000)c

(a) Tehachapi area growth assumptions:

Greater Area		Citywide	
1987-1990	7.5 percent annual	1987-1990	8 percent annual
1990-2000	5 percent annual	1990-2010	4 percent annual
2000-2010	3 percent annual		

(b) California Correctional Institution, approximate population of 5000.

(c) 1991 Revision

Sources: Kern County Planning and Development Services Department
Kern Council of Government, 1987; 1991

AGE DISTRIBUTION
1970 - 1990

	1970		1980		1990	
	Number	Percent	Number	Percent	Number	Percent
Under 18 yrs	1684	40.0	797	19.3	1890	32.6
18-54 yrs	1937	46.0	2880	69.8	2677	46.2
55 yrs and over	589	14.0	449	10.9	1224	21.1
Total	4210	100	4126	100	5791	100
Median Age	26.1 Years		31.7 Years		31.1 Years	

Sources: U.S. Bureau of the Census; California Department of Finance

Table 3-4

ETHNIC CHARACTERISTICS
1970 - 1990

	1970		1980		1990	
	Number	Percent	Number	Percent	Number	Percent
White ¹	3242	77	3101	75	4927	85
Black	-	-	10	-	64	1
Spanish Surname ²	842	20	806	20	1226	21
Other ³	126	3	209	5	800	14
Total	4210	100	4126	100	5791	100

¹Except persons with Spanish surname - 1970 and 1980.

²Hispanic origin of any race - 1990.

³Includes Asian/Pacific Islander and Native American.

Sources: U.S. Bureau of the Census; California Department of Finance

Table 3-5

OCCUPATION OF HOUSEHOLD HEAD

OCCUPATIONS (Persons over age 16)	1979	1989	% CHANGE
Managerial and Specialty Occupations:	333	530	59.16%
Executive, Administrative & Managerial	101	252	149.50%
Professional Specialty	232	278	19.83%
Technical, Sales and Administrative			
Support Occupations:	386	538	39.38%
Technicians and Related Support	26	34	30.77%
Sales Occupations	109	214	96.33%
Administrative Support, Including Clerical	251	290	15.54%
Service Occupations:	410	587	43.17%
Private Household	6	8	33.33%
Protective Service	152	208	36.84%
Service, except Household and Protective	252	371	47.22%
Farming, Forestry and Fishing Occupations:	62	88	41.94%
Precision Production, Craft and			
Repair Occupations:	254	363	42.91%
Operators, Fabricators and Laborers:	322	280	-13.04%
Machine Operators, Assemblers and Inspectors	103	102	-0.97%
Transportation and Material Moving	104	124	19.23%
Handlers, Equipment Cleaners, Helpers			
and Laborers	115	54	-53.04%
Total	100	100	
Total Households	1,438	1,536	

Sources: 1980 and 1990 U.S. Census

Table 3-6

ESTIMATED HOUSEHOLD INCOME DISTRIBUTIONS
1969-1990
(Percent)

Income Group	1969	1980	1990
Under \$5,000	13	12	5.3
\$ 5,000 to \$ 9,999	37	14	12.6
\$10,000 to \$14,999	34	15	9.2
\$15,000 to \$24,999	15	25	16.6
\$25,000 to \$49,999	-	26	39.1
\$50,000 and over	<u>1</u>	<u>8</u>	<u>17.1</u>
Total	100	100	100
Median Household Income	\$10,000	\$18,500	\$28,474

Sources: U.S. Bureau of the Census; California Department of Finance

of \$18,500. The 1989 median income level was \$31,100. Income levels in the City of Tehachapi are somewhat higher than county-wide incomes. The Bakersfield Metropolitan Statistical Area of Kern County shows a median income level of \$16,360 at the time of the 1980 U.S. Census.

3.3 HOUSING CHARACTERISTICS

3.3.1 Housing Inventory

The development of Tehachapi's housing stock is illustrated in Table 3-7, and indicates a growth from approximately 1,370 units in 1970 to nearly 1,560 units by 1979, and 2,430 units by 1990. This is an increase of 200 units over the nine year period from 1970 to 1979 and 645 units between 1979 and 1990.

In comparison with Kern County housing inventory trends, Tehachapi appears consistent, with multi-family construction leading single-family. The County shows a somewhat higher increase in mobile home development than the City of Tehachapi, perhaps because of the varied climate.

Table 3-7 indicates the size of households in Tehachapi as well as the housing inventory. The population per household has declined from 3.25 in 1970 to 2.70 in 1990. A comparison with overall Kern County shows that this is an unusually high rate of decrease, attributable to the increasing numbers of retirement age households that have moved into the area.

3.3.2 Building Permits

Recent trends in actual housing development are reflected in the building permit history for the City of Tehachapi, as shown in Table 3-8. While single family units represent almost 40 percent of the total permits issued between 1980 and 1991, multi-family units represented 57 percent of the total housing permits for that same period. Only 4 percent of the permits issued were for mobile homes. Most of the single family and multiple family housing development is occurring in the southern portion of the City. Most of this residential development is occurring in the southend of the City.

3.3.3 Age Of Housing Stock

The accepted standard for major rehabilitation needs is 30 years. As illustrated in Table 3-9, in 1991, only 6.9 percent of Tehachapi's housing stock was over 30 years old. However, within the timeframe of this Housing Element, nearly 48 percent of the City's current housing stock will be over 30 years old. This would indicate the potential need for rehabilitation and continued maintenance of approximately 1400 dwelling units by the year 2000.

Table 3-7

HOUSING INVENTORY TRENDS 1970-1990

Year	Housing Inventory	Type of Unit			Total
		Single-Family	Multi-Family	Mobile Home	
1970	Total Units	1,227	67	73	1,367
	Occupied Units	N/A	N/A	N/A	1,295
	Population per Household				3.25
1979	Total Units	1,258	152	148	1,558
	Occupied Units	1,210	145	125	1,480
	Population per Household				2.71
1990	Total Units	1,618	653	159	2,430
	Occupied Units	N/A	N/A	N/A	2,193
	Population per Household				2.63
1970-1990 Housing Inventory Change					
	Total Change	391	586	86	1,063
	Annual Average	20	30	4	53

N/A - Not Available

Sources: U.S. Bureau of the Census; California Department of Finance; Kern County Planning Department; Tehachapi City Planning Department

Table 3-8

BUILDING PERMIT HISTORY

Year	Type of Unit			Total
	Single-Family	Multi-Family	Mobile Home	
1980	5	52	4	61
1981	1	2	5	8
1982	2	2	4	8
1983	4	2	3	9
1984	2	53	5	60
1985	63	56	3	122
1986	100	243	5	348
1987	77	142	2	221
1988	46	24	0	70
1989	98	108	0	206
1990	60	0	6	66
1991	10	0	11	21
A. Total 1980-1984	14	111	21	146
Average 1980-1984	2.8	22.2	4.2	29.2
Percent Distribution	9.5	76.0	14.4	100
B. Total 1985-1990	444	573	16	1033
Average 1985-1990	74	95.5	2.7	172.2
Percent Distribution	43.0	55.5	1.5	100
C. Total 1980-1991	468	684	48	1200
Average 1980-1991	39	57	4	100
Percent Distribution	39	57	4	100

Source: Kern County Building Department

Table 3-9

AGE OF HOUSING STOCK: 1991
(Tract 61 Only)

Year Built	Number of Units	Percent of Total
1939 and earlier	203	6.9
1940 - 1949	160	5.5
1950 - 1959	636	21.7
1960 - 1969	400	13.7
1970 - 1979	328	11.2
1980 - 1991	<u>1200</u>	<u>41.0</u>
TOTAL	2927	100.0

Sources: U.S. Bureau of the Census, 1980 and 1990; California Department of Finance;
City Clerk

3.3.4 Vacancy Rates

Vacancy information for the City is described in Table 3-10, and is based on 1977 and 1990 Census figures. While the figures indicate an increase in the vacancy rate from 5 to 10 percent (generally 4 to 5 percent is accepted as "normal"), many of these units are either under construction or serve as second homes. Consequently, the actual vacancy rate is set at only 7 percent, which still does not indicate a tight market for housing in Tehachapi.

3.3.4 Owner/Renter Distribution

Table 3-11 indicates the distribution of occupied units by tenure. In 1980, almost 68 percent of occupied housing in Tehachapi were owner-occupied. In 1990, this figure had decreased to approximately 55 percent. Although declining, more than half of the homeowners still live in their homes.

3.3.5 Housing Cost

A sample check of houses advertised for sale in the local press during May 1979 revealed that the average asking price for a three-bedroom house in the City was over \$50,000. Only one three-bedroom unit was advertised at a price below \$40,000, and this listing was described as a "fixer upper". Three listings were priced in the \$40,000's, one in the \$50,000's, two in the \$60,000's and one in the \$70,000's.

During 1979, few rental units were advertised as available in the City. One-bedroom apartments ranged in price from \$155 to \$195 per month, and the one two-bedroom unit listed was priced at \$265 per month. Houses for rent brought higher prices, with three-bedroom units advertised at \$275 and four-bedroom units at \$350 to \$375. Mobile homes advertised for sale, not including land costs, were priced in the \$7,500 to \$13,500 range; it should be noted that these units were resales and that the price of new mobile homes was higher.

The 1980 Census listed the median home price at \$53,400 and median contract rent at \$194 per month. The vacancy rate for rentals was 3.3 percent.

A sample check of houses advertised for sale in the local press during August 1992 indicated that the average asking price for a three-bedroom house in the City was about \$95,000 to \$150,000. Two-bedroom houses had asking prices that ranged from \$90,000 to \$100,000. Some starter houses were in the \$70,000 to \$80,000 range.

In August 1992, one-bedroom apartments rented for \$300 to \$395 per month and two-bedroom units were advertised for \$345 to \$500 per month. Houses for rent were advertised at \$550 to \$850 for three bedrooms and one and one-half to two baths.

Table 3-10

ESTIMATED VACANCY DATA
1977 - 1990

Year	Type of Vacancy	Type of Unit			Total
		Single-Family	Multi-Family	Mobile Home	
1977	Available Vacant	16	7	4	27
	Percent of Total Units				1.8%
	Other Vacancy ¹	35	-	17	52
	Total Vacant	51	7	21	79
	Percent of Total Units				5.2%
1990	Available Vacant	69	80	26	175
	Percent of Total Units				7.2%
	Other Vacant ¹	31	29	2	62
	Total Vacant	100	109	28	237
	Percent of Total Units				10%

¹Includes units that are under construction, usual residence elsewhere, second home, seasonal, and/or migratory.

Sources: California Department of Finance; U.S. Bureau of the Census

Table 3-11

OWNER/RENTER DISTRIBUTIONS
1980 - 1990

Year	Tenure	Number of Units	Percent
1980	Owner-occupied	1,038	67.7
	Renter-occupied	496	32.3
	Total	1,534	100.0
1990	Owner-occupied	1,188	54.2
	Renter-occupied	1,005	45.8
	Total	2,193	100.0

Sources: U.S. Bureau of the Census; California Department of Finance

3.4 HOUSING NEED

A major function of the Housing Element is to quantify the unmet housing needs of the community, both for the present time and for the near future (to 1996).

Generally, current housing needs can be defined as the cumulation (accounting for statistical overlap) of the following:

- A. The number of dwellings that are substandard and in need of rehabilitation.
- B. The number of dwellings that are substandard and in need of replacement.
- C. The number of dwellings in which the occupants are overcrowded.
- D. The number of dwellings in which the occupants are paying a disproportionate share of their incomes for shelter.

The "unmet" housing need of a community is defined as the sum of all the above components that likely will not be met by the private marketplace acting alone or by existing housing program commitments. It is the intent of the Housing Element to provide policy and program direction toward the fulfillment of these remaining unmet needs.

The following discussions quantify current and future unmet housing needs for the City of Tehachapi.

The elements of existing housing need outlined above do not take into account the dynamics of population growth and operation of the housing market over time. Therefore, in order to quantify future housing needs, the following additional factors must be calculated:

- A. The need for additional housing stock generated by population growth and new household formations.
- B. The need for additional housing stock to replace units normally removed by operations of the market and to provide for adequate vacancy rates.

3.4.1 Building Condition

In 1978, the Kern County Community Development Department conducted a windshield survey of residential units within the City of Tehachapi in order to determine building conditions. This survey was updated in 1990 by the Tehachapi Planning Department. The units were evaluated on the following basis:

- A. "Standard" with no work required.
- B. In need of minor rehabilitation, such as painting or landscaping.
- C. In need of major rehabilitation, with visible structural or foundation damage.
- D. Should be demolished because of poor condition unsuited for rehabilitation.

Table 3-12 indicates that 3.6 percent of the City's housing stock was in need of major rehabilitation or demolition in 1970, and this increased to 5.1 percent in 1990. Approximately 21 percent was in need of minor rehabilitation in 1979, with 13 percent in 1990. Housing stock in "standard" condition constituted 76 percent in 1979 and 82 percent in 1990. These figures set the total unmet housing need for 1990, because of substandard structures, at 420 units, or approximately 17.3 percent of the total housing stock in the City of Tehachapi.

Based on this comparative analysis between 1979 and 1990, the newer construction activity has improved the availability of standard housing. However, much of the older housing throughout the City has deteriorated even further in the past decade.

3.4.2 Ownership/Building Condition

Incidences of deterioration are found in a variety of locations throughout the City, although more concentrated incidences tend to occur in the older, core area. The majority of deteriorated dwellings are located on parcels of land that are improved with more than one structure. In many instances, the owner of the property also occupies a unit on the parcel. These characteristics indicate that housing deterioration may be found in both owner-occupied and rental units; however, it is estimated that about two-thirds of all deteriorated dwellings in the City are renter-occupied.

Among those units considered to need only minor rehabilitation, a higher rate of owner-occupancy occurs than is the case with more severe deterioration. From a spot check in 1979 of homeowner property tax exemptions with deteriorated units, about 40 percent of the units needing minor rehabilitation were estimated to be occupied by their owners. From the same sample, it was estimated that less than 30 percent of the units needing major rehabilitation were owner-occupied.

3.4.3 Overcrowding

A household is typically considered to be "overcrowded" when the number of persons living in the house is greater than the number of rooms, excluding bathrooms and kitchens. Overcrowded households are usually a reflection of the lack of affordable housing

Table 3-12

BUILDING CONDITION SURVEY
1979 and 1990

	1979		1990	
	Units	Percent	Units	Percent
Standard	1,177	75.5	1,810	82
Needs Minor Rehabilitation	329	21.1	286	13
Needs Major Rehabilitation	47	3.0	93	4.0
Should be Demolished	5	0.3	21	1.0
Total	1,558	100	2,210	100

Source: Kern County Building Department

Note: Totals may not add to 100% because of rounding.

Table 3-13

HOUSEHOLDS WITH MORE THAN 1.01 PERSONS PER ROOM
1979 - 1990

	1979		1990	
	Number	Percent	Number	Percent
Total Households	1480	100	2587	100
Households Reporting More than 1.01 Persons Per Room	89	6.0	207	8.0

Sources: California State Dept. of Finance; U.S. Bureau of the Census

available. Households that cannot afford housing units suitably sized for their families are often forced to live in housing that is too small for their needs, which may result in poor physical condition of the dwelling unit.

Table 3-13 indicates those households with more than 1.01 persons per room, which are considered to be overcrowded and represent another unmet current housing need. The unmet need caused by overcrowding in Tehachapi in 1979 was 6 percent of the total, or 89 units. In 1990, overcrowding was seven percent of the total households, or 171 units. This is a relatively low proportion of overcrowded households compared to other communities in Kern County.

3.4.4 Overpayment

For the purpose of conducting housing analyses, the rule-of-thumb is that no more than 33 percent of household income should be spent for shelter. Table 3-14 shows the housing costs that would be accessible to the designated income groups with the City of Tehachapi median household income at \$31,100 per year.

Based on current market values for housing, as discussed in Section 3.3.5 of this Element, rental housing within the City of Tehachapi is affordable for all income groups.

A comparison of housing cost data indicates that in the 1990 housing market, a household with less than a twenty percent down payment must have an income of over \$26,000 per year in order to purchase the lowest-priced, previously owned housing in Tehachapi. Previously owned housing is available to only moderate or higher income households.

3.4.5 Special Housing Needs

The preceding discussions have quantified elements of existing housing need within the community. As part of a comprehensive assessment of the City's housing needs, it is also important to quantify certain additional characteristics of the housing supply and to relate them to the housing needs of residents. This comparison will indicate whether special housing needs exist within the City.

The disparity between current ownership housing prices and the prices that are affordable to very low- and low-income residents has been detailed in preceding material. The suitability of the current housing stock to other than price considerations is indicated by the characteristics of units available in the marketplace.

During the sample period of March 1990, when newspaper advertisements of sale and rental units were examined, only two-bedroom rental units were available to very low- and low-income households, and three-bedroom houses listed for rent at \$625 to \$1,000 per

Table 3-14

PRICE RANGE OF AFFORDABLE HOUSING BY INCOME GROUP: 1990

Income Group	Percent of Median %	Actual Income/Year \$	Housing Cost/Month \$
Very low	<50	<15,550	<428
Low	50 - 80	15,551 - 24,880	429 - 684
Moderate	80 - 120	24,881 - 37,370	685 - 1026
Above moderate	120+	>37,370	>1026

Source: U.S. Dept. of Housing and Urban Development

month. This data roughly indicates that housing for large lower-income families is limited within the community.

Those segments of the population experiencing special housing needs include the elderly, the handicapped, single-parent households and the homeless. The severity of these special needs within the City of Tehachapi is discussed below.

3.4.5.1 Elderly Households

According to the 1990 Census, 732 persons 65 years of age or older and 273 households with at least one member 65 years of age or older reside in the City of Tehachapi. The fixed or limited nature of many seniors' incomes poses a special problem with regard to housing affordability. This is documented in the 1990 Census, which reports that a high percentage of elderly households in the County have annual incomes less than the federally-designated poverty level. In addition, the elderly often have special needs in terms of size, design and accessibility of housing.

3.4.5.2 Disabled Households

It is estimated that 2.5 percent of Californians are physically disabled. This includes those who are legally blind, deaf, or who need ambulatory assistance. This particular definition is the most relevant to housing needs, as it corresponds to special physical features in housing, such as wheelchair ramps, wide doorways, varying electrical wiring, and lowered kitchen and bathroom fixtures.

Applying the 2.5 percent approximation to the City's 1990 estimated population, it can be projected that about 155 City residents are physically disabled. It also can be assumed that of those persons in need of special housing features, over half are of low and moderate income, and include members of family groups as well as the elderly.

A small percentage of these individuals have public transportation disabilities requiring them to rely upon others for mobility. While the needs of certain individuals (i.e., those who are blind, deaf or nervous-disordered) may be met without special housing accommodations, persons with ambulatory challenges often require specially designed barrier-free housing. Rental housing of this nature can be particularly difficult to find.

No measurable supply of housing suitable to the needs of disabled persons and their families is available within the City. This is true both with respect to smaller households, such as elderly families or single persons, and to disabled persons who are members of larger households.

3.4.5.3 Large Families

Large families (defined as comprised of five or more members) in the lower income groups are often at a disadvantage in obtaining adequate housing. Income is a major factor that constrains the ability of households to obtain adequate housing. Larger units are more expensive and most of the units with three or more bedrooms are in the single family ownership stock, not in the multifamily rental housing stock.

Of the 2,587 households in Tehachapi, 310 (or 12 percent) are comprised of five or more persons. By comparison, only eight percent of the City's housing stock is considered overcrowded, according to the 1990 Census. While the large families living within the City are generally adequately housed, large families in need of rental housing may have limited choices available to them. This situation can be even more acute for those families with lower incomes.

3.4.5.4 Single Parent Households

Households headed by women are disproportionately poor because women earn only about 65 cents for every dollar of men's wages (Women's Bureau of the U.S. Department of Labor, 1988). In female-headed households with children, child support allowances are often not paid or, if the support payments are made, they do not equal the actual costs of child support. Furthermore, women with children may not have adequate job skills and may, therefore, may have to live on the minimal support provided by Aid to Families with Dependent Children (AFDC).

According to the 1990 Census, approximately 260 single parent households reside in the City of Tehachapi. While unquantified, it can be safely assumed that many of these households have limited incomes and experience difficulty in finding adequate, affordable housing.

In general, working men earn substantially more per hour than working women; however, not all male-headed single parent households have sufficient income. In 1990, two percent of all California AFDC families were headed by a single male parent. Generally, poor families headed by men have the same need for housing assistance as those headed by women and will benefit from the same housing programs.

3.4.5.5 Farm Worker Housing

The California Government Code requires that the City of Tehachapi consider local farmworker housing needs in formulating the Housing Element of its General Plan Update. Kern COG estimated that no farmworker households were eligible for housing assistance in the City of Tehachapi in 1990.

3.4.5.6 Emergency Shelter

State law requires that the City address the emergency housing needs of the homeless within the framework of its Housing Element. In attempting to identify the needs of the homeless, Joan Siglin of the Salvation Army was contacted during preparation of this document. The Salvation Army reported that requests for emergency housing are received from households in the area as well as from transients. According to Ms. Siglin, approximately 200 persons per month are being assisted with meals and shelter. Referrals are made by local highway businesses, the County Sheriff and Fire Department. Funds are provided by the United Way, local churches, individuals and the Salvation Army. The recession has caused an increase in requests for assistance and a decrease in required funds. The immediate need for emergency shelter could be met with the addition of a six-bed shelter in the Tehachapi area.

Persons needing assistance include transients, about 25 percent of those assisted, and local mothers with children who have relatives at the prison. Typical services include one or two nights' shelter and two to three hot meals. Some clothing is also provided and a bag of grocery items.

Shelters that service the area are located in Bakersfield and Lancaster as listed below:

A. Families

Salvation Army	Lancaster
Catholic Church	Bakersfield
Love, Inc.	Bakersfield
Family Shelter	Bakersfield

B. Single Men

Salvation Army	Lancaster
Love, Inc.	Bakersfield

C. Battered Women & Children

Crisis Shelter	Bakersfield
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3.4.6 Summary of Current Unmet Needs

In summary, the current unmet housing needs of Tehachapi are comprised of the following:

- A. 400 dwellings are substandard and in need of rehabilitation.
- B. 21 dwellings are substandard to the degree that they cannot be rehabilitated.

- C. 171 households are overcrowded.
- D. 226 households were paying a disproportionate amount of their incomes for shelter in 1980.

Further qualification of the nature of special housing needs produced the following considerations:

- A. Without substantial down payments, households earning less than \$26,000 per year generally cannot purchase existing housing within the community.
- B. In order not to pay more than 33 percent of their income for shelter, a household must earn at least \$13,600 per year to afford the average one-bedroom rental in the City and \$15,800 to rent a two-bedroom unit.
- C. Senior citizens on fixed incomes may find it difficult to obtain small sized rental or sales units at prices they can afford.
- D. Large families, including those who are minorities, may find it difficult to secure large rental or sales units or to afford them.
- E. Housing suitable to the special needs of disabled persons may not be available within the community.

A substantial degree of overlap exists with respect to units that are substandard, units which are overcrowded and units that are occupied by households paying more than one-third of their incomes for shelter. No accurate data is available to quantify the degree of overlap; however, it is usually the case that most substandard housing is occupied by households who pay more than 33 percent of their incomes for housing and who also have low or moderate incomes. Thus, it is reasonable to assume a very high rate of overlap exists between substandard units and overpayment. In addition, it is usually the case that overcrowded units are occupied by very low- and low-income households and many of the community's overcrowded units are substandard in condition.

3.5 REGIONAL HOUSING ALLOCATION PLAN

3.5.1 Location and Population

The Tehachapi Planning Area covers 1,263.8 square miles in the southern Sierra Nevada Mountains. The Planning Area is comprised of Census Tracts 60, 61 and a portion of 61.01. The City of Tehachapi is the only incorporated city in the Planning Area.

The population of the Planning Area was calculated at 25,902 by the 1990 U.S. Census. By 1996, the population, according to Kern COG, is anticipated to increase to about 39,690, representing a 55 percent increase. The City of Tehachapi had a 1990 population of 6,182, according to the U.S. Bureau of the Census.

3.5.2 Economic Factors

The economy of the Planning Area is diverse. Many of the employment opportunities are found outside the area, with many persons commuting to the Bakersfield area and the Antelope Valley area of Kern and Los Angeles Counties, as well as to the Los Angeles Metropolitan area. Within the region a diverse range of activities are found, including resource extraction, wind power generation, building material production and limited agricultural activity. The California Correctional Institution, located west of the City, employs a significant number of staff who reside in the Tehachapi Planning Area.

3.5.3 Housing Stock

At the beginning of 1989, the Tehachapi Planning Area had an estimated 7,198 housing units, of which 6,572 units were occupied. Single family units accounted for 80 percent of the total, with multi-family and mobile homes each representing 10 percent. The owner-occupancy rate for the area was 71 percent.

3.5.4 Income Characteristics and Housing Demand

Income characteristics and future housing needs are listed in Table 3-15. These unit demands are pursuant to the 1990 Regional Housing Allocation Plan prepared by Kern COG.

Table 3-15

HOUSEHOLD INCOME AND REGIONAL SHARE ALLOCATION
(New Construction Need)
January 1, 1989 - July 1, 1996

Construction	Income Distribution	New Households	Vacant/ Removal Allowance	Need
Very Low (<50% median)	22%	247	59	306
Low (50%-80% median)	15%	173	41	214
Moderate (80%-120% median)	19%	216	51	267
Above Moderate (> 120% median)	44%	494	119	613
Total	100%	1,130	270	1,400

4.1 BACKGROUND

The City of Tehachapi adopted a series of goals and policies as part of its 1984 Housing Element to guide the development and implementation of its housing element. As part of the current Housing Element update, these adopted goals and policies have been evaluated in terms of their effectiveness and actual results in implementation. In addition, the adopted goals and policies were reviewed as to their appropriateness in addressing the housing needs identified in this Housing Element update.

The following goals and policies reflect a revision to those previously adopted to incorporate what has been learned from the prior element, and to address adequately the community's identified housing needs. These goals and policies will serve as a guide to City officials in daily decision-making.

4.2 HOUSING GOALS

The defined housing needs, plus the various constraints to housing provision, have been analyzed and provide the basis for the program strategy discussed below.

As specified in the State General Plan law and guidelines, the City's program strategy includes goals, policies and action programs that support the overall program design. The goals and policies are statements that will continue to be valid over time, regardless of program or funding availability.

The City of Tehachapi has adopted five goals for its housing program that are consistent with State and regional housing policies. These goals are:

- A. Provision of an adequate supply of sound, affordable housing in a safe and satisfying environment for all Tehachapi residents, regardless of age, race, sex, marital status, ethnic background, income, or other arbitrary factors.
- B. Improvement and enhancement of the older sections of the City for protection of the existing housing supply, more economical use of services, prevention of blight, and maintenance of property and tax values.
- C. Assistance to developers and builders in the provision of a wide range of housing by location, type of unit and sale or rental price; this includes the provision of adequate housing for those of very low, low and moderate income, as well as elderly households.

- D. Provision of incentives to reduce residential energy use within the City, in order to decrease housing maintenance costs, as well as to conserve natural resources.
- E. Protection of Tehachapi's quality of life, to include the designation of suitable sites and standards for residential development as outlined in the Goals and Policies of the Land Use Element.

To attain these goals, the City has committed itself to specific policies and programs. The policies are categorized under five issue areas that are identified by the California Department of Housing and Community Development as important priorities in addressing local housing problems.

This section presents a discussion of the problems inherent in each of the issue areas, followed by policies adopted by the City to resolve these problems. The action programs intended to effect their solution then are discussed, including responsible agency/city department, funding source, and timeframe for completion of each program.

In aggregate, the Element's action programs set forth the following five-year housing goals:

Total Units to be Constructed:	1400 new sales and rental housing units through 1996
Total Units to be Rehabilitated:	20 housing units
Total Units to be Conserved:	50 units

4.3 HOUSING SUPPLY AND DEVELOPMENT ISSUES

Issue 1: ADEQUATE PROVISION

Adequate provision for the housing needs of all economic segments of the community is an issue of the highest priority in Tehachapi. As previously discussed in Section 3.0, it appears unlikely that market forces alone will produce enough housing that is affordable to low and moderate income households to meet expected needs. Since decent housing for all is important to the welfare of the entire city, it is particularly important to address this need through the use of those public powers that impact housing.

To ensure adequate provision of housing for all economic segments of the community, the City of Tehachapi shall:

- 1) Provide a range of housing types and densities adequate to accommodate housing needs for all economic segments of the community.
- 2) Conserve existing mobile home parks. Ensure adequate sites for mobile and modular housing.
- 3) Allow second units in single family residential neighborhoods.
- 4) Reduce to the extent appropriate the impact of governmental constraints on the production of housing.

Issue 2: NEIGHBORHOOD PRESERVATION

The objective of this goal is to increase the supply of sound housing in the City through the rehabilitation of as many housing units as may be feasible given the financial and technical resources available over the next five years. The City also will support housing rehabilitation activities in adjacent unincorporated areas that would complement improvement activities within the City. The City's quantified housing rehabilitation goal is for at least 20 units. (See Table 4-1).

Approximately 380 Tehachapi residences can be considered substandard and in need of renovation. An estimated 40 percent of these units are owner-occupied, leaving around 60 percent that are rentals. Generally speaking, substandard units are owned or rented by those on limited or fixed incomes. Characteristics of substandard housing include inadequate sanitation, structural hazards, hazardous electrical wiring, plumbing, or mechanical equipment, faulty weather protection, inadequate exits, or improper occupancy.

The housing rehabilitation programs in this section are designed to address both the need for improvement in housing conditions and the

need to assure continued affordability of rehabilitated units; they provide assistance to both owner-occupants and to rental units.

In order to preserve housing and neighborhoods, the City of Tehachapi shall:

- 1) Require new development in and/or adjacent to existing residential neighborhoods to be compatible, in terms of scale, size and design, with the prevailing character of the established neighborhood.
- 2) Promote self help maintenance of homes
- 3) Promote mixed residential and commercial uses in the Village to provide housing for "special needs" households.
- 4) Maximize use of vacant land within the City and land contiguous to current development (infill) for housing.
- 5) Identify areas of the City and its sphere of influence where infill is appropriate and encourage its development through use of various incentives.
- 6) Monitor the condition of the housing stock within the City.

Issue 3: PRESERVING AFFORDABILITY AND ACCESSIBILITY

Providing housing opportunities for all households regardless of race, color, religion, sex, family size, marital status, national origin, ancestry, age or physical disability is an essential element of a sound housing program. In order to assure non-discrimination in housing, the City contracts with the Kern County Fair Housing Council, which investigates complaints of discrimination because of race, ethnicity, marital status, or sex. The Fair Housing Council also handles problems with evictions, rent increases, substandard housing conditions, and disputes regarding deposit returns, as well as arbitrating landlord/tenant conflicts.

An important aspect of making housing available to all economic segments of the community is ensuring that assisted housing remains affordable to the income groups for which it was intended or that presently occupy it. In the rental housing market, the priority of preserving affordability may conflict with that of preserving housing and neighborhoods, since rehabilitated units can command higher rents. This conflict necessitates a delicate balance.

In order to preserve affordability and accessibility, the City of Tehachapi shall:

- 1) Increase the supply of housing affordable to households with special needs whose annual household income is below the County median of \$33,300. Provide for development of 520 units.

- 2) Promote housing design standards that optimize accessibility to units by the disabled and elderly.
- 3) Maintain and expand rental assistance to the City's lower income and special needs households.
- 4) Develop programs to preserve housing affordability, including the provision of adequate housing for those of very low, low and moderate income, as well as elderly households.
- 5) Address problems of homeless individuals and families.

Issue 4: ENERGY CONSERVATION

Reducing expenditures for energy can result in effective reductions in housing expenses, since the costs of utilities are part of overall housing costs. The City does, therefore, want to encourage more efficient use of energy to promote private benefits (less expensive utility bills) and public benefits (reduced reliance on imported fuel).

In order to conserve energy, the City of Tehachapi shall:

- 1) Actively enforce new state construction standards for energy efficient housing.
- 2) Continue development and refinement of programs for recycling of materials, such as newspaper, glass, aluminum, plastic, and yard waste.
- 3) Continue to support alternative forms of transit such as buses, bicycles, vanpools, and walking.

Issue 5: QUALITY OF LIFE

Although the term "quality of life" is elusive of precise definition, it is incorporated in the Tehachapi Housing Element goals and policies as a means to perpetuate the unique natural and cultural setting of the region for the enrichment of the City's residents. Preserving quality of life does not require halting economic growth or dismantling the industrial system. In order to maintain its image as a mountain village, the City has a need to design and enact a set of policies that provide direct incentives to consumers and business to protect the area's open space, visual beauty, and recreational opportunities.

This goal is more extensively discussed in the Open Space/ Recreation Element, and is included here to maintain consistency within all of the City's General Plan Elements.

In order to preserve the quality of life, the City of Tehachapi shall:

- 1) Require that all development activity perpetuate the natural beauty of the area and that reasonable steps be taken to incorporate the existing unique image of the City into future development.
- 2) Designate suitable sites and development standards for residential land uses, as outlined in the Goals and Policies of the Open Space and Land Use Elements.

4.4 HOUSING PROGRAMS

GOAL #1 - Provide an adequate supply of sound, affordable housing in a safe and satisfying environment for all Tehachapi residents, regardless of age, race, sex, marital status, ethnic background, income, or other arbitrary factors.

Policy 1: Provide a range of housing types and densities adequate to accommodate housing needs for all economic segments of the community, projected to be 1400 additional units during the planning period (1991-1996).

Program 1.1 Continue to utilize the services and programs of the Kern County Fair Housing Council.

Responsible Agency: Planning Department

Funding Source: General Fund (for staff time)

Timeframe: Ongoing

Program 1.2 Maximize use of the City's share of County Community Development Block Grant allocations; increase participation in available housing development and preservation programs.

Responsible Agency: Planning Department

Funding Source: CDBG funds; General Fund (for staff time)

Timeframe: Ongoing

Program 1.3 As further and refined 1990 Census data becomes available, assemble data to update projections and extrapolations found in this Housing Element. In addition, refine the land use data base and building activity monitoring to enable annual evaluation of housing need and efforts to meet need.

Responsible Agency: Planning Department

Funding Source: General Fund (for staff time)

Timeframe: Annually

Program 1.4 Continue inter-agency coordination and cooperation with Kern COG and other County governmental agencies on housing issues.

Responsible Agency: Planning Department

Funding Source: General Fund (for staff time)

Timeframe: Ongoing

Policy 2: Conserve existing mobile home parks whenever possible. Ensure adequate sites for mobile and modular housing and monitor the condition of the mobile/modular housing stock.

Program 2.1: Continue to allow construction of mobile/modular home parks and subdivisions. Housing rehabilitation monitoring should include mobile/modular homes.

Responsible Agency: Planning Department

Funding Source: General Fund (for staff time)

Timeframe: Ongoing approvals of development applications. Establish monitoring program as an ongoing activity.

Policy 3: Allow second ("granny") units in single family residential neighborhoods.

Program 3.1: Continue to allow construction of a second residential unit on the same parcel as an existing single family dwelling unit, provided it meets existing City development standards.

Responsible Agency: Planning Department; County Building Department

Funding Source: General Fund (for staff time)

Timeframe: Ongoing

Program 3.2: Encourage the use of new and innovative building materials that meet or exceed minimum Building Code requirements where it can be shown that such innovations will reduce the cost of residential construction.

Responsible Agency: Planning Department; County Building Department

Funding Source: General Fund (for staff time)

Timeframe: Ongoing

Program 3.3: Periodically review user fees for public services and facilities to ensure that the charges are consistent with the costs of improvements and maintenance.

Responsible Agency: Public Works and Planning Departments

Funding Source: General Fund (for staff time)

Timeframe: Annually

Policy 4: Reduce to the extent appropriate the impact of government constraints on the production of housing.

Program 4.1: Expedite permit and approval processing for affordable housing developments. Affordable developments shall be defined as those that restrict the rental or sale price of five percent or more units to levels affordable to households earning less than \$28,000.

Responsible Agency: Planning Department

Funding Source: General Fund (for staff time)

Timeframe: Ongoing

GOAL #2: Improve and enhance the older sections of the City for more economical use of services, protection of the existing housing supply, prevention of blight, and maintenance of property and tax values.

Policy 5: Require new development in and/or adjacent to existing residential neighborhoods to be compatible, in terms of scale, size and design, with the prevailing character of the established neighborhood.

Program 5.1: To enhance their sense of belonging, housing developments for low and moderate income households should be designed so they do not stand out in the neighborhood. Forms, materials, and proportions that allow the development to blend in with its surroundings should be utilized.

Responsible Agency: Planning Department

Funding Source: General Fund (for staff time)

Timeframe: Ongoing

Program 5.2 In order to preserve the character of existing neighborhoods, develop standards for replaced residences and review such structures for architectural compatibility.

Responsible Agency: Planning Department

Funding Source: General Fund (for staff time)

Timeframe: Ongoing

Policy 6: Promote self-help maintenance of homes.

Program 6.1: Provide home repair videos to city residents at little or no cost.

Responsible Agency: Planning Department; County Building Department

Funding Source: General Fund (for staff time)

Timeframe: Establish as ongoing program in FY 92/93

Program 6.2 Assist developers and non-profit organizations who chose to prepare and submit applications for FmHA Section 523 Technical Assistance Grants for Mutual Self Help Housing, and pursue other sweat equity (such as Habitat for Humanity) housing programs to assist families in building their own homes.

Responsible Agency: Planning Department.

Funding Source: General Fund (for staff time)

• Timeframe: Ongoing

Program 6.3

Continue to promote and support interested community groups who initiate volunteer Community Home Repair Assistance Programs. Such efforts are seen as a means by which housing and neighborhood conditions throughout the community can be improved. In many communities, local civic, service and/or church groups have organized programs wherein members volunteer their time and expertise to assist others within the community to make needed home repairs. Many such programs focus especially on the home improvement needs of the elderly and disabled, while others are directed to the needs of all residents who need such assistance.

Responsible Agency: Civic, service and/or church groups in cooperation with Planning Department

Funding Source: None required

Timeframe: Ongoing

Program 6.4

Periodically designate a day as "Neighborhood Clean-up/Fix-up Day," with City sponsorship, to demonstrate a commitment to the objective. Encourage trash elimination, tree pruning, yard cleaning, fence painting and similar minor fix-up activities. Neighborhood Clean-up/Fix-up Campaigns are related both to the prevention of deterioration by the encouragement of continued home maintenance and to the stimulation of housing rehabilitation activities. The City will cooperate with neighborhood groups, civic organizations and others willing to assist in program publicity and/or willing to lend a hand to those, such as elderly and disabled, who might be unable to perform minor maintenance tasks themselves.

Local financial resources permitting, the City will make available throughout the community special trash pick-ups and other similar activities. The City will encourage the community to draw upon its civic pride for this activity and ask neighbor to help neighbor in making the community a more attractive place to live.

Responsible Agency: Planning and Public Works Departments

Funding Source: General Fund (for staff time)

Timeframe: Semi-annually

Policy 7: Promote mixed residential and commercial uses in the Village to provide housing for "special needs" households, particularly the elderly and small business owners.

Program 7.1: A combined residential and commercial zone (Mixed Use zone) for the Village area (old town site) shall be implemented as part of the Downtown Specific Plan.

Responsible Agency: Planning Department

Funding Source: General Fund (for staff time)

Timeframe: Within one year of Housing Element adoption

Program 7.2: Funds, such as State CDBG monies, will be sought to rehabilitate upper-story units in the Village.

Responsible Agency: City Administrator

Funding Source: State CDBG program

Timeframe: 1993-1996

Policy 8: Maximize use of vacant land within the City and land contiguous to current development (infill) for housing, in order to reduce cost of facilities and create a compact city form.

Program 8.1: Prepare and maintain a land inventory of available vacant property zoned for residential uses; make list available to developers and owner/builders.

Responsible Agency: Planning Department

Funding Source: General Fund (for staff time)

Timeframe: Within 6 months of Housing Element adoption.

Policy 9: Identify areas of the City and its sphere of influence where infill is appropriate and encourage its development through use of various incentives.

Program 9.1: Develop new grant sources and continue with programs to finance infrastructure costs related to multi-family development in older core areas including assessment districts, tax exempt loans, Community Development Block Grant funds, and deferred payment financing.

Responsible Agency: City Administrator

Funding Source: Various

Timeframe: Ongoing

Policy 10: Monitor the condition of the housing stock within the City.

Program 10.1: Inventory the condition of the housing stock semi-annually.

Responsible Agency: City Code Enforcement Officer

Funding Source: General Fund (for staff time)

Timeframe: Semi-annually

GOAL #3: Assist developers and builders in the provision of a wide range of housing by location, type of unit and sale or rental price to meet existing and future needs of Tehachapi residents.

Policy 11: Increase the supply of housing affordable to households with special needs whose annual household income is below the County median of \$33,300. Provide for development of 520 units for these groups during the plan period.

Program 11.1: Work with Kern County to establish **Housing Information Hot Line**. A need exists in the City for more widespread knowledge and information about housing programs, advantageous and available financing, and methods to implement passive design concepts for energy conservation.

The City supports the establishment of a county-wide toll-free hot line to provide relevant housing information to all residents of the County. Such a hot line might be administered by a public agency with countywide responsibilities, such as the Kern County Community Development Department, or by a private, nonprofit group interested in helping to

solve the areawide housing problems.

Responsible Agency: Kern County Board of Supervisors via budget approval and/or private organizations

Funding Source: Community Development Block Grant

Timeframe: Ongoing

Policy 12: Promote housing design standards that optimize accessibility to units by the disabled and elderly.

Program 12.1: Require that all new multi-family residential development, including those serving low income and elderly households, conform to the handicapped access requirements of California Administrative Code Title 24 and the Uniform Building Code.

Responsible Agencies: Planning Department; County Building Department

Funding Source: General Fund (for staff time)

Timeframe: Ongoing

Policy 13: Maintain and expand rental assistance to the city's lower income and special needs households.

Program 13.1: Work with the Kern County Housing Authority to target rental assistance to households of greatest need, including large families, single-parent households, and the disabled.

Responsible Agency: Planning Department

Funding Source: General Fund (for staff time)

Timeframe: Ongoing

Program 13.2: Participate in the Kern County Fair Housing Program as a means of implementing fair housing goals. Rental property owners and tenants, as well as homebuyers and sellers, can call the Fair Housing Program for information related to discrimination in access and occupancy of housing.

• Responsible Agency: Planning Department; County Building Department

Funding Source: General Fund (for staff time)

Timeframe: Ongoing

Program 13.3: Require that all Specific Plans include policies to facilitate the expansion of day care opportunities that would meet the needs of single parent households. Coordinate with Tehachapi Unified School District and Tehachapi Parks and Recreation District to further promote after school programs.

Responsible Agency: Planning Department

Funding Source: General Fund (for staff time)

Timeframe: Ongoing

Program 13.4: Continue to provide housing assistance and information on housing rehabilitation/repair, financing, fair housing, landlord/tenant disputes, emergency shelter, and low-cost rental housing.

Responsible Agency: Planning Department; Housing Authority; Fair Housing Council; Salvation Army

Funding Source: General Fund

Timeframe: Ongoing

Program 13.5: Repeal Chapter 18.92 of the Tehachapi Zoning Ordinance and adopt new Density Bonus Ordinance that implements the provisions of California Government Code Sections 65913.5 and 65915, and any amendments thereto. The new ordinance will include concise definitions of all income levels. This ordinance will not be included in the text of the Housing Element but will be measure a intended to implement the Housing Element.

Responsible Agency: Planning Department

Funding Source: General Fund (for staff time)

Timeframe: 1993

Policy 14: Develop programs to preserve housing affordability, including the provision of adequate housing for those of very low, low and moderate income and elderly households.

Program 14.1: Maximize use of available resources to assist in provision of affordable housing by:

(1) offering financial and other development incentives;

(2) utilizing assessment districts or Mello-Roos community facilities districts to finance needed on- and off-site improvements;

(3) coordinating with and assisting private developers who propose construction of low or moderately-priced housing units in Tehachapi, by expediting the application and by other available means;

(4) matching and coordinating City housing efforts with available County programs for development and preservation of housing, including:

o Community Development Block Grant Funding Housing Preservation Program Assistance

- a) Housing Rehabilitation program
- b) Fair Housing program
- c) Rental Rehabilitation program
- d) Land Cost Write Downs/Subsidized Infrastructure programs
- e) Rental Housing Construction programs

o County Community Development Program Department Housing Development Assistance

- a) Density Bonus program
- b) Housing Incentives program (HIP)
- c) Neighborhood Public Improvements program
- d) HOME Investment Partnerships program

o Kern County Housing Authority

- a) Municipal Mortgage Loan program
- b) Single Family Mortgage Revenue Bond program
- c) Multiple Family Mortgage Revenue Bond program
- d) Section 8 Housing Assistance Payments program

Responsible Agency: Planning Department

Funding Source: Community Development Block Grant; General Fund (staff time)

Timeframe: Ongoing

Program 14.2 Investigate the feasibility of using infrastructure financing districts and tax increment financing to fund public capital facilities within areas that do not qualify as redevelopment areas, subject to approval by voters or landholders of the proposed district.

Responsible Agency: City Administrator; Planning Department

Funding Source: Community Development Block Grant; General Fund (staff time)

Policy 15 Address problem of homeless individuals and families.

Program 15.1 Permit the establishment of homeless shelters for overnight lodging in religious or social organization buildings in those areas designated for multi-family residential, commercial, or public facility uses, subject to approval of a conditional use permit.

Responsible Agency: Planning Department

Funding Source: General Fund (for staff time)

Timeframe: Within 1 year of Housing Element adoption

GOAL #4: Provide incentives to reduce residential energy use within the City, in order to decrease residential energy use within the City, in order to decrease housing maintenance costs, as well as to conserve natural resources

Policy 16 Actively enforce new state construction standards for energy efficient housing.

Program 16.1 The design of a subdivision for which a tentative map is required (pursuant to Section 66426, Government Code) shall provide, to the extent feasible, for future passive and natural heating and cooling opportunities in the subdivision. Examples of passive or natural heating opportunities in subdivision design, include design of lot size and configuration to permit orientation of a structure in an east-west alignment for

southern exposure. Examples of passive or natural cooling opportunities in subdivision design include design of lot size and configuration to permit orientation of a structure to take advantage of shade or prevailing breezes. (Reference: Section 66473.1, Subdivision Map Act)

Responsible Agency: County Building Department; Planning Department.

Funding Source: General Fund (for staff time)

Timeframe: Ongoing; revise Subdivision Ordinance within 6 months of Housing Element adoption.

Program 16.2 (A) Encourage use of energy conservation devices and passive design concepts that make use of the natural climate to increase energy efficiency and reduce housing costs. (B) Encourage unit retrofitting through public education, including attic insulation and weather stripping, concurrent with improvements to the dwelling.

Responsible Agency: Water Department

Funding Source: General Fund (for staff time)

Timeframe: Ongoing; revise Subdivision Ordinance within 6 months of Housing Element adoption.

Program 16.3 Cooperate with utility companies to inform public about energy saving modifications for existing housing and new construction.

Responsible Agency: Water Department

Funding Source: General Fund (for staff time)

Timeframe: Ongoing

Program 16.4 Incorporate landscaping standards requiring xeriscape to conditions of approval for all subdivisions and housing projects.

Responsible Agency: Planning Department

Funding Source: General Fund (for staff time)

Timeframe: Within 1 year of Housing Element adoption

Policy 17 Continue development and refinement of programs for recycling of materials, such as newspaper, glass, aluminum, plastic bottles, and yard waste.

Program 17.1 Require that space be set aside in commercial and multifamily buildings for the separation and temporary storage of recyclables. New and existing developments will be required to submit a recycling program, meet volume requirements for recycled materials and satisfy design guidelines for enclosures and containers.

Responsible Agency: Public Works Department

Funding Source: General Fund (for staff time)

Timeframe: Revise Zoning Code within 6 months of Housing Element adoption

Program 17.2: Review City Zoning and Subdivision regulations, environmental assessment and site plan review guidelines, as well as municipal landscaping guidelines; revise as appropriate to address the issue of solar access.

Responsible Agency: Planning Department

Funding Source: General Fund (for staff time)

Timeframe: Revise Zoning Code within 6 months of Housing Element adoption.

Policy 18: Continue to provide opportunities for alternative forms of transit, such as buses, bicycles, vanpools, and walking.

Program 18.1: Maintain Tehachapi Transit dial-a-ride program to respond to transportation needs of all residents, particularly the elderly, disabled, low-income, and student populations.

Responsible Agency: City Administrator

Funding Source: Kern COG Article 4 Grant; State Department of Transportation 16B2 Grant

Timeframe: Ongoing

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF HOUSING POLICY DEVELOPMENT

1000 THIRD STREET, Room 430
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**RECEIVED**

MAY 14 1993

CITY OF TEHACHAPI

May 12, 1993

Mr. Lawrence M. Cook
City Administrator
City of Tehachapi
P.O. Box 668
115 South Robinson Street
Tehachapi, California 93581-0668

Dear Mr. Cook:

**RE: Review of the Revision to Tehachapi's Draft Housing
Element Update**

Thank you for submitting the revision to Tehachapi's draft housing element update, received for our review on April 1, 1993. As you know, we are required to review draft housing elements and report our findings to the locality (Government Code 65585(b)). Identified concerns were reviewed with City Planner, Christopher Grimes, in a telephone conversation on May 7, 1993.

We are pleased to find that this revision adequately addresses all the comments made in our March 23, 1993 telephone conversation with Mr. Grimes and our March 24, 1993 review letter. Once the element, including this revision, is adopted it will comply with State housing element law (Article 10.6 of The Government Code).

To ensure final compliance with State housing element law, the City should submit the adopted element as soon as possible, pursuant to Government Code Section 65585(g). While the revised draft element now addresses all the statutory requirements, the element must be adopted and submitted to this Department to be in full compliance with the law. We look forward to receiving a copy of the adopted housing element update.

Again, we commend the City and Mr. Grimes for working diligently to develop a housing element which complies with the law. We are confident the City will find that its efforts to develop an adequate housing element and its commitment to implement the plan and programs will provide new housing for all income groups and provide many benefits for the entire community.

Program 18.2 Maintain and expand on-road easements such as Antelope Run for use by bicyclists, horseback riders and pedestrians.

Responsible Agency: Planning Department

Funding Source: Kern COG Article 3 Grant; State Department of Transportation 16B2 Grant

Timeframe: Ongoing

GOAL #5: Protect Tehachapi's quality of life through the designation of suitable sites and standards for residential development.

Policy 19 All development activity shall perpetuate the natural beauty of the Tehachapi area and reasonable steps shall be taken to incorporate the unique setting of the City into future development.

Program 19.1 Modify Title 17, Subdivision Ordinance, Section 17.42.040 to require a minimum of five acres of open space per 1000 population.

Responsible Agency: Planning Department

Funding Source: General Fund (for staff time)

Timeframe: Within one year of Housing Element adoption

Program 19.2 Continue implementation of Quimby Ordinance (Title 17, Subdivision Ordinance, Section 17.42.020) to collect fees for future parklands. This fee is collected at the time of subdivision tract and residential parcel maps approval.

Responsible Agency: Planning Department

Funding Source: General Fund (for staff time)

Timeframe: Ongoing

Policy 20 Designate suitable sites and development standards for residential land uses, as outlined in the Goals and Policies of the Land Use Element.

Program 20.1

Conversion of agricultural lands to residential land uses will occur only when they are contiguous to the urbanized area and can be served with municipal services in a cost effective manner.

Responsible Agency: Planning Department

Funding Source: General Fund (for staff time)

Timeframe: Ongoing

4.5 QUANTIFIED HOUSING OBJECTIVES

The City has identified specific quantified goals to meet its housing needs during the five-year planning period 1991-1996. These goals are summarized in Table 4-1.

In Tehachapi, sufficient vacant and underutilized residential sites are available to accommodate anticipated housing needs within existing City limits over the five year planning period. Currently, potential sites are available to develop a total 1400 single and multiple family units under the recently adopted Land Use Element.

Residential growth within the City over the past few years has averaged less than 100 units, primarily because of a building moratorium instituted in Tehachapi that resulted from lack of sewage plant capacity. The moratorium has been lifted recently. The general economic recession has precipitated a slowdown in primary and secondary home construction and purchase. A third factor is the lack of employment opportunities in the immediate area. Many of the job opportunities in Tehachapi are retail and service minimum-wage positions. Professional and technical/trade job opportunities are available in the Bakersfield metropolitan area as well as at Edwards Air Force Base near the town of Mojave and the aerospace industries located in Lancaster and Palmdale. These employment centers all necessitate a 45-to-60 minute one-way commute.

Housing projections for Tehachapi prepared by Kern Council of Governments are based on analyses that indicate the City and its surroundings will be the second fastest-growing community in Kern County over the next five to ten years. Tehachapi is located along Highway 58, which is experiencing increased use as a east/west corridor between Highways 14 and 395 in the Mojave Desert and Highways 99 and I-5 that bisect the San Joaquin Valley.

However, Tehachapi has reached its critical mass in terms of economic development and must now work to attract light, clean industry to the area. While the community is at elevations between 4000 and 5000 feet, the overall climate is conducive to growth and development. In addition, Sky Mountain and Bear Valley Resorts, approximately 15 miles southwest of the city, actively promote Tehachapi as a relaxing and scenic tourism and second home region.

September 1992 building permits in Kern County dropped 33 percent from the year previous. Tehachapi city issued \$71,516 in permit value, down from \$468,226 a year ago, but January to September values were substantial, \$9,380,589 versus \$2,404,621 in 1991. Tehachapi's unincorporated area reported 74 permits, valued at \$1,772,399, were taken out in September 1992, compared to 88 permits valued at \$2,009,379 for the same period in 1991.

No assisted dwelling units have been constructed in Tehachapi specifically targeted for low and moderate income groups since 1987. The City's goal for the five-year planning period is to facilitate construction of 247 assisted, affordable units within the City. While this goal is ambitious in relation to past activity, several proposed projects will provide affordable housing units as well as "trickle-down" housing that will become available as the economy improves.

Currently, only two Section 8 Certificates have been issued within the City limits. According to the Kern County Housing Authority, the high cost of living, limited medical services, as well as lack of transportation options in this rural mountain region, limit the effectiveness of the Section 8 program.

TABLE 4-1

QUANTIFIED HOUSING OBJECTIVES

1. Objective: Provide adequate sites for single family units.
Projection: 2909 potential sites for SF units; no additional lots needed to meet anticipated demand
2. Objective: Provide adequate sites for multifamily units.
Projection: Approve 280 additional MF units
3. Objective: Construct market rate units
Projection: Construct 600 units.
4. Objective: Construct units targeted for low and moderate income groups.
Projection: Construct 247 units.
5. Objective: Construct senior-occupied units
Projection: Construct 50 affordable units; construct 25 moderate or market rate units.
6. Objective: Create low-income units through government programs.
Projection: Create 200 additional units.

7. Objective: Produce self-help housing.
Projection: Produce 5 units
8. Objective: Assist dwelling unit rehabilitation
Projection: Assist 20 units.
9. Objective: Maintain scattered-site Section 8 Certificates.
Projection: Maintain 2 existing Section 8 Certificates.
10. Objective: Obtain additional Section 8 Certificates
Projection: Obtain 4 new Section 8 Certificates
11. Objective: Provide housing information and referral assistance.
Projection: Assist 180 persons.
12. Objective: Conserve existing housing stock.
Projection: Assist in conservation of 50 units.

TABLE 4-2

Quantified Objective	New Construction	Rehab	Conservation
Very Low-Income	306	11	36
Low Income	214	7	14
Moderate Income	267	2	0
Above Moderate Inc.	613	0	0

The City currently has limited resources to meet its housing goals by 1996. However, the City is committed to pursue all available avenues, including but not limited to public/private partnerships, financial and non-financial incentives, seeking outside funding, coordination with other agencies, and use of available grant funds, to meet these identified housing goals.

4.6 POTENTIAL LOSS OF SUBSIDIZED HOUSING UNITS

The City conducted a survey in April 1992 to determine the number of assisted housing units subject to conversion to non-low income use during the next ten-year period. This survey included review of the State HCD's inventory listing of "At Risk of Conversion" Units and the Kern County Community Development Program Department affordable housing project files. City staff interviewed representatives from the County Housing Authority as well as the federal Department of Housing and Urban Development and the Farmers Home Administration (FmHA) Rural Multi-Family Housing Assistance Program.

Mulberry Villa Apartments at 404 West "E" Street were constructed under the FmHA 515 Program. The apartment projects consists of 44 units, with approximately 90 people residing in 16 one-bedroom units and 28 two-bedroom units. The average size of the one-bedroom units is 556 square feet and 757 for the two-bedroom units.

The Tehachapi Senior Manor at 544 and 554 West "E" Street were constructed in two phases as part of the FmHA 515 Program. Phase I, constructed in 1984, includes 28 one-bedroom units of 754 square feet, 5 two-bedroom units of 856 square feet, and 4 handicap-accessible one-bedroom units of 756 square feet. Phase II was constructed in 1987. It includes 40 one-bedroom units of 626 square feet and 4 two-bedroom units of 746 square feet.

The FmHA 515 Program is funded by the U.S. Department of Agriculture. It provides reduced interest payments and rent subsidies to the developer of housing for very low- and low-income renters, as well as the elderly and disabled. The risk of conversion to standard income housing is very limited because of the covenants placed on the loans in that there is a 20-year prepayment restriction. In addition, at the end of the loan period, the developer is offered equity loans and opportunities to sell the property to nonprofit organizations such as the Kern County Housing Authority.

The subsidized housing in Tehachapi is not considered to be at risk of conversion, as the City has not issued mortgage revenue bonds, has not approved any density bonuses with financial assistance, does not have an in-lieu fee program, and has not assisted multifamily housing with redevelopment or CDBG funding.

The implementation of housing programs identified in Chapter 4 is dependent on individual and collective efforts within the City and County. The effectiveness of such a combined effort is critical to the overall success of the Housing Element. While this unified effort will provide support vital to the plan, an interagency departmental strategy is critical to the implementation phase. Since the City of Tehachapi's General Plan will serve as the major policy document to assist public and elected officials in decision-making, it is essential that consistency among the seven required elements of this General Plan Update serve as a framework for consideration of the Housing Element and its subsequent adoption and implementation.

This chapter outlines the activities and responsibilities of the various governmental agencies (along with private entities) whose input and cooperation are essential to the implementation process. Where relevant public entities have developed programs (above and beyond those program activities outlined in Chapter 4) which would complement, supplement, or facilitate the implementation of the programs in the Housing Element, those additional program activities are briefly discussed.

5.1 CONSTRUCTION PROGRAMS

Various actions and funding commitments must be made by several public and private entities in order to implement the programs described in Chapter 4. The following is a general description of the activities that must occur to fully implement the identified programs.

5.1.1 Farmers Home Administration Section 515 Rental Housing Program

The primary responsibility of this program lies with the developer and the Farmers Home Administration (,FDd). ad finances this program to provide housing for low- and moderate-income families and elderly persons. Loans are made available to nonprofit corporations, limited profit corporations and public bodies who meet the specified eligibility requirements. Once eligibility requirements are met, the developer submits the development package to the local ad office for review and approval.

As tenants must not pay more than 25 percent of their adjusted income for rent and utilities, HUD Section 8 Housing Assistance Payments may be made available to tenants to assist in their rent payments. If Section 8 funds are utilized, the developer must also submit the developer's package to HUD for approval. Utilization of HUD Section 8 funds would be dependent on availability of allocations to the Housing Authority or directly to the developer. Requests to HUD for housing assistance payment allocations could come from either the developer or the Housing Authority.

Responsibilities of the City primarily involve assisting in the identification/formation of a nonprofit or limited profit organization (which would assume the responsibility of project initiation), assisting the developer in site location, providing technical assistance (if necessary) in completing the application package to ad (and HUD, if appropriate), and promoting the program throughout the City of Tehachapi. The Community Development Program Department and the Housing Authority could also assist the City and developers in program implementation by providing technical assistance and program promotion.

5.1.2 HUD Section 235 Homeownership Program

In this program, HUD and the local lending institutions share the major responsibility for program operation. HUD provides mortgage insurance to families who meet income eligibility requirements and pays interest subsidy payments to local lending institutions. The builder/developer also plays a key role in this program, as the house must meet HUD standards. When a subdivision under construction includes houses that will receive Section 235 financing, HUD will have already committed to a specified number of Section 235 mortgages. This assures buyers that mortgage money is available.

The involvement of City and County staff in this program is minimal and consists primarily of assisting developers in the identification of potential sites if the developer plans to construct a tract of Section 235 housing, and providing information to prospective home buyers on the specifics of the Section 235 program. (The informational responsibilities of the City or County could be combined with other information programs).

5.1.3 Farmers Home Administration 502 Program

ad is the prime initiator for this program by making loans directly to qualified borrowers to build, buy or rehabilitate housing that meets ad's standards. Developers who meet eligibility requirements may not only obtain loans to construct ad housing, but may secure precommitments for permanent financing for the potential homebuyer.

City staff would assist in disseminating program information to potential builders and home buyers, as well as providing technical assistance to builders as required.

5.1.4 Local Plan and Standards Review

City planning staff would be responsible for reviewing the existing General Plan Elements and zoning ordinances and, where necessary, revising, updating, or developing additional plans or ordinances that would facilitate the development of affordable housing. Should staff time be prohibitive to the accomplishment of this program, staff could prepare a grant application to the State Department of Housing and Community Development, the State Office of Planning and Research, or to HUD for funding to utilize outside

resources (consultants, part-time employees, college graduate students, etc.) for programs implementation. The Community Development Program could, if required, provide technical assistance in the preparation of the grant application package, as well as providing technical data, if appropriate.

5.1.5 Affordable Housing Incentives Program

To implement this program, the City Planning and Building Departments (with input/approval from the City Council) would develop a range of incentive guidelines for use by developers who include 25 percent low- and moderate-income housing in their developments. Input from developers who might ultimately utilize the program could be valuable in the development of incentive guidelines. Once the program parameters have been finalized, City staff would be available to assist builders/developers in understanding the incentives program and promoting its use in the provision of housing for low- and moderate-income persons.

5.1.6 Housing Information Hot Line

Development and operation of the Housing Information Hot Line would be the responsibility of the County Community Development Department. Funding would be requested from HUD through the Block Grant application process. The City would cooperate with the County in promoting the program and to identify, where possible, private groups or organizations that might be available to assist in the operation of the Hot Line. Should volunteer personnel be utilized, various departments within the County (Community Development, County Planning, Building and Safety Department, Department of Public Health) could provide expertise in training sessions for the volunteers.

5.1.7 Section 202 Supportive Housing for the Elderly

The federal Department of Housing and Urban Development Section 202 program provides funding to construct senior housing and to provide long-term rental subsidies on the units. Eligible under the program is the acquisition, construction, and rehabilitation of properties and certain other related costs. This program is implemented by private nonprofit organizations, and City staff would be available to assist with grant applications and implementation.

5.2 REHABILITATION PROGRAMS

5.2.1 Farmers Home Administration 502 Program

See Subsection 5.1.3 for specific details regarding this type of rehabilitation program.

5.2.2 FmHA Section 504 Rehabilitation Loans and Grants

Although ad is directly responsible for program funding, the success of this program is dependent on the availability of people (whether City staff or the County Community Development Program Department) to assist the very low-income homeowner in the loan or grant application process. Either entity, as part of the total rehabilitation effort, could provide assistance and identify builders/contractors/ handymen who would make minor repairs to the dwellings. Utilizing 504 funds for minor rehabilitation, with technical assistance from the City staff or the County Community Development Program Department, would stretch the availability and effectiveness of Block Grant dollars.

5.2.3 HUD Section 8 Moderate Rehabilitation Program (or Successor Programs)

HUD, Kern County Housing Authority and local property owners would be the major entities responsible for the implementation of this program. HUD would invite nonprofit or profit-motivated developers (individually or together with the local Housing Authority) to submit development proposals for rehabilitation of rental units. Once proposals were accepted, HUD would enter into an housing assistance payment contract with the Housing Authority for a specified period of time upon completion of the rehabilitation of the rental units. Owner/builders would be able to obtain financing for rehabilitation programs from local lending institutions, as mortgage loans can be federally insured.

The City would play a role in this effort by providing the technical data necessary for a development proposal and by encouraging property owners to participate in the rehabilitation effort by providing the technical expertise that usually lacking by property owners and developers may need to complete government project forms for the first time. The City could also assist developers by identifying the need for this type of effort in various plans and policy documents.

5.2.4 Community Home Repair Assistance Program

The success of this program is dependent on commitment and community pride by the residents of Tehachapi. Civic, service or church groups would need to identify and initiate the volunteer programs of home repair for the elderly, handicapped or other disabled persons in need of assistance.

The City would, through various housing information programs, act as liaison for those who need assistance and those organizations with volunteer programs.

5.2.5 Materials Grant Program

Before this program can be utilized, the County Community Development Program Department (based on requests from the City of Tehachapi) would have to request program funding from HUD through the Community Development Block Grant application. Upon HUD's approval of the funding requests, the City would coordinate with the volunteer organizations in program publicity. The availability of money for materials also could be publicized through other programs.

5.2.6 Home Improvement Information Program

This program would be an integral part of the Housing Information Outreach Program described previously. Overall program development and administration would come from the County Community Development Department with funding and informational materials from HUD. Kern COG, County Housing Authority and various State agencies would provide program informational materials or expertise. Assistance would also be encouraged from local lending institutions and builders.

Should the City become actively involved in a rehabilitation effort, they would disseminate information regarding rehabilitation techniques and financing.

5.3 CONSERVATION PROGRAMS

5.3.1 Home Maintenance Counseling Program

The Home Maintenance Counseling Program would be more intensive and for a longer duration than the Home Improvement Information Program. In addition to use of Block Grant funds, the City would seek program funding from the State Department of Housing and Community Development for the extension of counseling services. The City would also promote the program and seek technical assistance from local contractors, trade unions, educational institutions and civic organizations to assist in program implementation.

5.3.2 Neighborhood "Clean-Up/Fix-Up" Campaigns

Implementation of this program relies primarily on civic groups, service clubs and church organizations. The City would initiate and promote this program (along with the local news media), and provide extra trash pick-ups, etc. The success of this program is dependent on the cooperative spirit and civic pride of Tehachapi's residents.

5.3.3 HUD Section 8 Housing Assistance Payments Program

This program (now being implemented Countywide) is HUD's Section 8 existing housing program and is administered in Kern County by the County Housing Authority. The Housing Authority makes housing

assistance payments to private property owners to make up the difference between the fair market rent and what an eligible tenant can afford to pay.

A unit must be in sound condition to be eligible for this program. Property owners in Tehachapi could be required to make minor repairs to their rental units before their property could qualify for the program. This would increase the overall supply of sound housing in the City.

For increased use of this program, the County Housing Authority would have to increase their housing assistance payment allocations through a request to HUD. Once additional allocations are made available, the City would publicize the program availability to both the potential tenants and the property owners.

5.3.4 Preservation of Assisted Units at Risk of Conversion to Non-Low Income Uses

The purpose of this program is to prevent the prepayment of federally assisted mortgages and the consequent displacement of tenants. The program is also intended to extend the existing low-income use and restrictions of housing projects in exchange for incentives to the owners and to promote the transfer of affordable housing to owners dedicated to its long-term preservation as low income housing.

As required by Chapter 1451, Statutes of 1989, the City of Tehachapi has ascertained that it does not have any affected projects and will submit a finding adopted by resolution of the City Council to the State Department of Housing and Community Development to that effect.

The State has determined that one subsidized residential project, Mulberry Villa, is at risk. According to the Farmers Home Administration this housing development can not be converted to market rate housing during the period of this Housing Element (1990-1996) and can not be converted until after the year 2011 at the earliest. Although the mortgage could be prepaid, the earliest prepayment date that it could occur would be 2001 and a substantial prepayment penalty would result making it financially undesirable to prepay. If the project were sold to a non-profit organization or housing authority during the 20 year period, the project still is precluded from conversion to market rate housing. These statements are a result of discussions with Mike Carnes, at the Visalia Office.

TABLE 5-1

AGENCY COORDINATION SUMMARY

RESPONSIBLE ENTITY

<u>PROGRAM</u>	<u>CITY</u>	<u>COUNTY</u>	<u>STATE</u>	<u>FEDERAL</u>	<u>COMM. DEV. DEPARTMENT</u>	<u>HOUSING AUTHORITY</u>	<u>OTHER</u>
HUD Section 8 Housing Assistance Payment Program (or Successor Program)	-Assist in site evaluation -Insure project meets defined housing needs -Promote program through housing information systems	-Provide technical support, if appropriate	-Provide technical support, if appropriate	-HUD allocates funds for Housing Assistance payments -HUD approves additional allocation requests from Housing Authority	-Provide technical support, if appropriate	-Assist private developer to initiate project (optional) -Request additional program allocations -Administer program	-Private developer initiates project -Leading institutions provide favorable mortgage rates -Property owners participate in program
Section 8 Program for Elderly and Handicapped (or Successor Program)	-Assist in site evaluation -Assist in determination of need -Assist in formation of non-profit organization (if appropriate)	-Provide technical support, if requested	-Provide technical support, if requested	-HUD allocates funds for Housing Assistance payments -Considers needs for this housing type and gives priority over family units	-Provide technical support, if requested	-Assist in formation of non-profit organization, if appropriate	-Private developer initiates project -Non-profit sponsor initiates project
Farmers Home Administration Section 515 Rental Housing Program	-Assist in formation of non-profit organization -Assist in identifying limited profit organizations -Provide technical assistance/informa- tion to developers -Assist in site evaluation -Assist in program promotion to citizens, as appropriate			-FmHA provides project financing -HUD approves Section 8 Housing Assistance payments (optional)	-Assist in formation of non-profit organization, if appropriate	-Assist in formation of non-profit and/or limited profit organizations -Administer Section 8 Housing Assistance Payments Program (optional)	-Developers initiate and manage project

TABLE 5-1, cont'd

AGENCY COORDINATION SUMMARY

RESPONSIBLE ENTITY							
PROGRAM	CITY	COUNTY	STATE	FEDERAL	COMM. DEV. DEPARTMENT	HOUSING AUTHORITY	OTHER
HUD Section 235 Homeownership Program	-Assist developer in site evaluation -Assist in verification of need -Identify qualified buyers	-Provide technical support, as appropriate	-Provide technical support, if required	-HUD provides mortgage insurance -HUD provides interest subsidy on mortgage -HUD provides advanced commitments on units	-Provide technical support, if appropriate	—	-Developers initiate project -Lending institutions participate in program
Farmers Home Administration Section 502 Program	-Publicize/promote program -Provide technical assistance/information to developers -Provide assistance to homeowner in making loan requests to FmHA	—	—	-FmHA approves project -FmHA approves pre-commitments to potential home buyers -FmHA approves loan requests	-Publicize program through other rehabilitation efforts -Assist homeowners to prepare loan applications -Assist in locating persons to do rehabilitation work	—	-Homeowners request loans from FmHA -Builders/contractors available to do rehabilitation work -Private developers or buyer initiates project
-Local Plan and Standards Review	-Review local codes and ordinances, if necessary -City Council and Planning Commission approves revisions -Staff assists developers in site selection, interpretation of codes/ordinances	—	—	—	-Assist in program publicity, as appropriate		-Private developers initiate projects

TABLE 5-1, cont'd

AGENCY COORDINATION SUMMARY

RESPONSIBLE ENTITY							
PROGRAM	CITY	COUNTY	STATE	FEDERAL	COMM. DEV. DEPARTMENT	HOUSING AUTHORITY	OTHER
-HUD Section 8 Moderate Rehabilitation Program (or Successor Program)	-Provide technical assistance/data for development proposals -Encourage property owners to participate in project	--	--	-HUD-FHA provides mortgage insurance -HUD funds Section 8 HAP's	--	-Assist property owners in development proposals to HUD, seek financing to accomplish project -Administer Section 8 Program	-Property owners or developers submit proposals to HUD, seek financing to accomplish project -Lending institutions fund rehabilitation projects
-Community Home Repair Assistance Program	-Coordinate promotional efforts through on-going City Information programs	--	--	--	--	--	-Civic service or church groups participate in projects
-Neighborhood "Clean-Up/ Fix-Up" Campaigns	-Promote program throughout City -Provide trash pick-up -Encourage involvement of civic, church and service organizations	--	--	--	--	--	-Civic groups, church organizations and service clubs participate in program -Publicity from local news media
Hud Section 202 supportive housing for the elderly	-Assist in site evaluation -Assist in determination of need -Assist in formation of non-profit organization (if appropriate)	-Provide technical support, if requested	-Provide technical support, if requested	-HUD provides projects funds	-Provide technical support, if requested	-Assist in formation of non-profit organization, if appropriate	-Private developer initiates project -Non-profit sponsor initiates project

*Kern COG provides technical assistance, if appropriate, and assists the Community Development Program Department with program information.

TABLE 5-1, cont'd

AGENCY COORDINATION SUMMARY

RESPONSIBLE ENTITY							
PROGRAM	CITY	COUNTY	STATE	FEDERAL	COMM. DEV. DEPARTMENT	HOUSING AUTHORITY	OTHER
Affordable Housing Incentives Program	-Review existing development requirements -Determine range of developer incentives -Obtain input on incentives -Obtain input on incentives from builders/developers/ Planning Commission/ City Council -Publicize final program details -Assist developers with Program Utilization	—	—	—	-Assist with defining program parameters -Provide funding for incentive options (optional) -Assist with program publicity	—	-Developers assist with program development and review
Housing Information Hot Line	-Promote program in City	-Assist in training operational personnel (optional)	—	-HUD supplies grant monies for program operation and a variety of printed materials	-Fund and operate program	—	-Private organizations to operate program (optional)
Farmers Home Administration Section 504 Loan/Grant Program	-Assist in program publicity -Provide assistance to homeowners in requests to FmHA, as appropriate	—	—	-FmHA approves loan and grant requests	-Publicize program through other rehabilitation efforts -Assist homeowners in loan and grant requests to FmHA -Assist in locating persons to do rehabilitation work	—	-Homeowners request loans or grant from FmHA -Builders/ contractors available to do rehabilitation work

This chapter responds to the requirements of the Government Code Section 65583 that relate to the inventory/identification of available housing sites and an analysis of the constraints and opportunities for the provision of housing to all income segments within the community. The Code requires that a comprehensive review be undertaken by governmental and regulatory agencies of the community to inventory available sites, to assess service and infrastructure capacities, and to identify prevailing market conditions.

The City's ability to provide suitable housing that meets the needs of residents from all economic segments is largely dependent on opportunities within the community. These opportunities are determined primarily by the availability of sites that can accommodate a range of housing unit types. Housing opportunities are often tempered by constraints imposed by both the private and the public sectors. Local land use controls and infrastructure capacities can constitute constraints to housing development, as can construction costs for low- and moderate-income units that are incurred by the developer. This chapter provides an analysis of the various opportunities and constraints that are specific to the development of housing in the City of Tehachapi.

The City of Tehachapi follows established standards for the development of housing in the area. Criteria for assessing the suitability of housing sites is outlined below. These requirements are sometimes based on, or directly incorporated, as a result of criteria set forth by public agencies such as the Department of Housing and Urban Development (HUD) or the Farmers Home Administration (ad); therefore, requirements imposed by these agencies are identified.

6.1 LAND AVAILABILITY

The Land Use Inventory, Table 6-1, identifies the amount of land suitable for residential development, including vacant sites and sites having the potential for redevelopment, that may be utilized to meet the projected housing need through 1996.

The primary reason for the comprehensive general plan update, including this Housing Element revision is to assess the current lack of infrastructure in the City and to establish a program to co-ordinate annexations and development of mixed density residential land with the construction of sewer and waterlines and streets. Until such time as the comprehensive update is complete new housing can not move forward with the exception of approved tentative maps.

The majority of the current supply of available vacant land that is served by infrastructure is commercial and industrial land. This land is in areas unsuitable to residential development including

airport approach and departure zones, railroad and highway corridors heavily impacted by noise, and partially developed industrial areas with a higher incidence of health and safety risks. The areas that have approved tentative maps can not be rezoned to accomplish the goals of the State without a possibility of litigation resulting from voiding approved projects financed through municipal debt.

The amount of land available for the development of housing is crucial in considering methods of meeting housing need. There must be sufficient vacant, residentially-zoned land within the City limits or areas to be annexed that meets the projected housing needs through 1996. A determination of land availability was made from a careful review of Tehachapi's recently updated Land Use Element. This compilation resulted in an estimate of the amount of vacant land suitable for residential development. The projected housing construction need for Tehachapi through 1996 is 1,400 units. At an average of four units per acre, 350 acres are needed. The Land Use Element provides 1,254 acres of vacant land, which is far in excess of this requirement, although existing infrastructure in these areas is limited or nonexistent. In general the housing stock in the City is of a quality that does not warrant redevelopment, therefore the City doesn't include redevelopment as a viable method of increasing density.

TABLE 6-1

INVENTORY OF AVAILABLE INCORPORATED RESIDENTIAL LAND

Zone	Maximum Dwelling Units Per Acre	Vacant Acres	Dwelling Unit Potential
R-E	0.5	595.30	298
R-1-15	3	91.79	275
R-1-12	3	15.49	46
R-1-8	5.4	424.12	2,290
R-2	16	85.55	1,369
R-3	29	<u>31.25</u>	<u>906</u>
		1253.50	5237

Notes:

R-E	=	Residential/Estate
R-1-15	=	Single Family Residential, 15,000 sq. ft. lot minimum
R-1-12	=	Single Family Residential, 12,000 sq. ft. lot minimum
R-1-8	=	Single Family Residential, 8,000 sq. ft. lot minimum
R-2	=	Medium Density Multiple Family Residential, 7,000 sq. ft. lot minimum
R-3	=	High Density Multiple Family Residential, 7,500 sq. ft. lot minimum

6.2 UTILITIES AND SERVICES

The ability of the community to provide adequate infrastructure and services (roads, water, sewer, etc.) to new housing developments is an important element in meeting future housing needs. Requirements that are placed on the developer to provide utilities and municipal services may prove restrictive when weighed with other construction/property costs and the return on housing investments in today's market. The section below provides an assessment of these utilities and public services, any limitations they may have, as well as a forecast for future development. This data was obtained primarily through interviews with local government and utility officials. An overview of all utilities and public services in Tehachapi is presented in Table 2-3.

6.2.1 Domestic Water

As indicated in the Conservation Element, the City of Tehachapi's municipal water supply consists of two storage tanks (1.26 million gallon total capacity), two storage reservoirs (2.8 million gallon capacity), three water wells, and a distribution system of 4-inch to 16-inch lines. The City currently participates in an exchange pool through the Tehachapi-Cummings County Water District that distributes California State Water Project water to agricultural users while allowing groundwater draft for municipal use. This system of water allocation has evolved to protect Tehachapi Basin groundwater supplies. At the present time, no significant groundwater quality problems exist, and the groundwater levels are stable and slowly rising since implementation of the Groundwater Management Program in 1974. The City has an extensive system of distribution lines serving existing development within the City.

In 1991, the City used approximately 1,361 acre-feet of water. The average person uses about 240 gallons per day. In 1991, the City's base allotment was approximately 882 acre feet. The City also planned to pump 1,170 acre feet from the exchange pool.

It is City policy to acquire water rights upon annexations whenever possible. In the event water rights are not provided upon annexation, the cost of providing purchased water to the project is absorbed by that project.

6.2.2 Sewer

The existing sewer treatment system includes a plant consisting of two Imhoff tanks, one trickling filter, four oxidation ponds covering approximately 14 acres, plus one small irrigation storage pond. Plant effluent is treated to "primary" standards and disposed of by evaporation, percolation and flood irrigation on nonfood crops. Construction is currently underway to expand the existing treatment plant capacity from .85 to 1.25 million gallons per day (MGD), which will provide a capacity for approximately 5,000 additional residents. Growth beyond the 5,000 additional

residents will be served by eventual expansion of the plant to 2.5 MGD. The wastewater plan includes extension and development of sewer lines and effluent discharge sites.

6.2.3 Streets

Many road widening projects and several new streets will be needed to accommodate the levels of development proposed under the General Plan. Increased traffic on the major thoroughfares such as Valley Boulevard and Tehachapi Boulevard, as well as Curry Street and Tucker Road, is anticipated.

The Westwood Boulevard/Tucker Road project will provide an important link in the road system that will require the cooperation of the City, County, Golden Hills Community Services District and Tehachapi Valley Recreation and Parks District as regional growth continues.

The City will require those projects that precipitate a deterioration in the road system to mitigate that impact to an appropriate amount based on a traffic impact study prepared in conjunction with each development project.

6.3 HOUSING PRODUCTION CONSTRAINTS

Even the best intentions to provide housing for all segments of the community can encounter prohibitive constraints. Governmental constraints such as inflexible land use plans and bureaucratic red tape, are more conducive to change since they are more controllable than market or public perception constraints. Market constraints include economic variables such as high interest rates, inflation, and labor shortages that may interact in the private market as change agents. These economic variables may be affecting the region as well as the community. Public perception constraints can be crucial to the adoption of housing assistance programs and may influence whether certain housing needs in the community will be met.

Generally, housing constraints can be overcome or coordinated through program alternatives. In order to maximize positive changes, these constraints must be identified and investigated so that solutions may be explored.

6.3.1 Market Constraints

With few exceptions, the costs associated with housing (material, development fees, land, labor and capital) have been increasing for the past decade. These high costs pose a major constraint to the provision of housing for people of all economic segments of the community. Construction costs have risen substantially and older homes are in such demand that prices for them are unaffordable to many homebuyers. The following items are representative of market constraints to meeting Tehachapi's housing needs:

- a. Insufficient family income is available to finance improvements to housing units identified as needing major rehabilitation. While sufficient statistical data is not available to quantify any correlation between income and housing condition, it can be assumed most of the units requiring rehabilitation are occupied by low and moderate income families and other residents living on fixed incomes.
- b. Many residents of Tehachapi, especially the elderly, qualify for rent subsidy programs, but may be unaware of the types of assistance available. Construction and land costs make provision of rental units for low- and moderate-income families extremely difficult without use of state or federal financial assistance.
- c. The community's economic base traditionally has been the Monolith Portland Cement Plant, the Calaveras Cement Plant and, more recently, the nearby state correctional institution. These employers present little opportunity for increased employment in the foreseeable future. (Increased production at the cement plants will be achieved largely through automation.) Location and development costs limit the City's options for expanding its industrial base; the City is dependent on commuters and retirees for future population and tax base growth.
- d. The cost of borrowing money has risen significantly in recent years. These costs discourage many homeowners from actively pursuing home improvements or buying new homes. The elderly, unmarrieds, and young couples are most affected by this problem.

6.3.2 Governmental Constraints

Factors related to governmental procedure and the community's development plans and standards may impede the timely and effective construction of needed housing units. Certain problems have been identified in Tehachapi from data provided by local agencies as well as through comments made at public meetings. The following items are representative of governmental constraints to meeting identified housing needs in Tehachapi:

- a. Land Use Controls: The City of Tehachapi Land Use Element supports relatively low density development in response to the residents' desire to maintain a rural mountain community. The community has identified the preservation of agricultural/open space land, traffic congestion, air quality, and water availability as key issues during the General Plan update process; therefore, these concerns must be balanced with affordable housing needs.

The City adopted a revised Zoning Ordinance in 1990 which allows development in the R-3 Zone District at a maximum Density of 29 units per acre and in the R-2 Zone District at a density of 16 units per acre. Until the adoption of the comprehensive General Plan Update these zoning district densities are inconsistent with the currently adopted Land Use Element. The State has found the current Land Use Element to be a governmental constraint to development. The City can not correct this constraint until such time as the State approves the draft Housing Element format , the City completes the comprehensive General Plan Update, and a comprehensive Program Environmental Impact Report to evaluate and where appropriate mitigate the impacts associated with the massive housing construction program proposed to accommodate the Regional Housing Allocation plan.

Tehachapi's Land Use Element allows for housing densities up to 29 dwelling units per acre in High Density Residential zones, although the City's policy does not authorize subdivision of land to this density. In addition, 16 dwelling units per acre are permitted in Medium Density Residential zones. A maximum of 5.4 dwelling units per acre are allowed within Neighborhood Residential zones.

While lower densities may be viewed as a constraint to housing, density bonuses would be allowed for projects that include very low-, low-, and moderate-income housing units.

In addition the City has found that it is infeasible to develop residential projects at a density higher than 16 units per acre unless multi-story development is utilized. The historic pattern of occupancy of housing by very low and low income residents in Tehachapi is in rental housing. The rental housing market in Tehachapi is primarily in apartment complexes where economies of scale can be achieved in the provision of infrastructure not available in a detached housing configuration. It is not feasible to subdivide land at the density of 16 to 29 units per acre and still accommodate the stormwater, parking and recreational needs of residents. In more urban areas where the residents are less dependent on automobiles this problem does not exist to the same extent as in the Tehachapi area. The City has found it feasible to accommodate development at a density of 29 units per acre when the development is multistory and takes place on parcels in excess of 11,250 square feet. In general the development of 7,500 square foot parcels with 5 units (29 units/acre) does not prove to be feasible.

The City has a greater problem in providing for the 880 moderate and above moderate income housing units than in providing for the 520 low and very low income housing units proposed in the Regional Housing Allocation Plan. The City needs to approve an additional 306 units of very low income housing, 83 units of low income housing and 89 units for above moderate income housing. On February 2, 1993 there were 123 vacant units affordable to very low income people and 50 vacant units available to low income people. The high vacancy rate in the Tehachapi area has created a situation where lenders do not find the market can absorb additional units and therefore construction of additional units is unwarranted.

The State has determined that the City minimum lot size of 8,000 square feet in the R-1 Zone District precludes opportunities for all income groups. Apparently the State feels that all residential development should occur in such a manner as to be affordable to low and very low income residents. The Regional Housing Allocation Plan has proposed that the City increase housing opportunities for moderate and above moderate income residents, therefore the State goals of providing housing do not appear consistent with the state mandate to provide housing of differing character to meet the different economic characteristics of the residents. The City currently has recorded or approved 818 lots that have an average lot size of approximately 6,000 square feet. The Tehachapi area has over 365 homes on the market and the City has an excessive number of homes on the market developed on lots ranging from 4,500 square feet to 7,000 square feet in area.

Both the Capital Hills Specific Plan and the Specific Plan area in Section 28 propose medium and high density development. Those projects can not proceed until the adoption of the General Plan Update and program EIR. Market conditions do not support the construction of these projects at this time and foreclosures have or may take place on each site.

- b. Building Codes and Enforcement: Enforcement of building regulations do not place serious constraints on residential development in Tehachapi. New construction is required to meet Uniform Building Code regulations. However, there is no ongoing systematic enforcement of building codes upon existing dwelling units, unless a complaint is made or a permit is sought for additional construction, which could require the applicant to bring the building (or part of it) up to current codes.
- c. Infrastructure: The existing public facilities, including water and sanitary sewer, have the capacity to accommodate a population of approximately 26,000. The

sewer treatment plant is undergoing an extensive upgrade to increase the capacity of 1.25 MGD with expansion potential to 2.5 MGD. Drainage facilities will be expanded as development occurs. Where increases in residential densities threaten to impact circulation patterns, improvements and/or traffic mitigation fees are required as part of the permit approval and CEQA process. It is the intent of the City to require future development to pay its fair share of needed improvements. dme

Currently the City does not have sufficient infrastructure in areas appropriate for medium and high density residential development.

- d. Permit Approval Process: The development review process can affect housing costs. Because of interest rates and inflation, the longer it takes for a development proposal to be approved, the higher the development costs. Development application processing has basic time requirements as a result of the City's obligation to evaluate projects adequately, as well as the requirements of State law. These include consistency with the General Plan and Zoning Ordinance, requirements of the Subdivision Map Act, and compliance with the California Environmental Quality Act (CEQA).

Processing times for development review vary, based on the size of the project and the extent of environmental review required, and can range from 30 days to one year if an EIR is required. These timelines incorporate the streamline permit process that has been developed to reduce costs to the developer.

The City of Tehachapi allows the installation of manufactured housing "by right" provided that they meet the architectural standards established by G.C. § 65852 et. seq. This provision is set forth in the Tehachapi Zoning Ordinance.

- e. Fees and Other Exactions: The City assesses a number of fees that affect development and cost of housing in Tehachapi. Table 6.2 indicates in general the costs of a building permit. A park dedication (Quimby Act) fee is charged to acquire park acreage consistent with the growth of the population. The City collected school impact fees until 1987 on behalf of the Tehachapi Unified School District; however, a state law that went into effect on January 1, 1987, allows the school district to levy its own impact fee without City involvement.

TABLE 6.2

SCHEDULE OF BUILDING PERMIT FEES: 1992

Valuation:	Based on \$43.99 per square foot of living area, plus \$15.69 per square foot of garage, and \$10.81 per square foot of deck.
Building Fee:	Value x 1.2%
Plan Check:	33% of Building Fee
Inspection Fee:	Building Fee less 1.2% of value and 33% Plan Check Fee
Sewer Treatment:	\$1,097.00 (Plant)
Sewer Disposal:	\$ 777.00 (Borrow Pit)
Sewer Trunk:	Mulberry - \$160.00 Mill - \$215.00 "D" Street - \$221.00
Strong Motion Instrumentation:	.0001% of Valuation
Water Meter:	\$150.00 (3/4 inch)
Water Connection:	\$1,209.00 (Wells and reservoirs)

Source: Kern County Building Dept.; City of Tehachapi Sewer and Water Fee Study, Lockman & Associates, 1991.

Note: Table to be revised as necessary and kept on file in the Planning Department.

6.3.3 Public Perception Constraints

Public perception of housing issues may constitute constraints to the development of housing that meets the needs of varying income groups. Several generally held perceptions have surfaced at public meetings held in Tehachapi.

- a. Residents may be unaware of programs to assist them in improving their dwellings or in finding sound housing at an affordable price.
- b. Some residents expressed resistance to federally sponsored programs that involve direct government participation in the provision of housing and which may preempt local control in meeting housing needs. However, programs through which the government facilitates the provision of affordable housing by the private sector would be acceptable in the community to meet housing needs of special groups, such as the elderly, if local efforts to meet the same needs are infeasible.
- c. Citizen participation in rehabilitation and conservation programs has been slow to develop. Leadership potential

to promote citizen initiative in these efforts is present in church organizations, service clubs and other citizen organizations, but this potential has not been used effectively.

6.3.4 Infrastructure Constraints

While the City of Tehachapi places few constraints on development of housing, a major constraint to the expansion of the housing supply is infrastructure deficiencies. The City does not have sufficient reserve funds to construct streets and other infrastructure to serve outlying areas but has expended funds to construct new sewer treatment facilities, sewer trunk lines, water trunk lines and a new 1,500,000 gallon reservoir and water well. Forty acres of land are designated for medium density residential development that are adjacent to both sewer and water lines and can accommodate new development. The remaining areas that are designated for medium and high density development are outside the existing developed area of the City and therefore will require the extension of sewer and water lines. One of the primary areas that is expected to provide new medium and high density development is within the Nunes Ranch area in Section 28. This area is currently cultivated farmland; therefore, the conversion from agricultural uses to residential development is also a constraint to development. Farmland conversion is of concern to the State Department of Conservation.

Additional constraints to new development are a result of the Congestion Management Plan which requires the City to maintain at least a Level Of Service (LOS) E on State Route 202, and the Circulation Element of the City that requires an LOS C. Currently, some segments of State Route 202 are operating at LOS F and other streets are approaching LOS C or lower. Traffic improvements including street widening and signals are required to maintain efficient traffic flow and air quality; therefore, traffic mitigation may create some constraints to residential development.

The lack of drainage facilities throughout the City may be considered a constraint to development. Currently, no drainage facilities are available to serve areas proposed for medium and high density development. A failure to construct these improvements will lead to damage of streets, unsafe conditions for motorists and property damage to land downstream of new residential areas.

The statewide drought conditions may be considered a constraint to development. For new development to take place in the City, it is necessary to import water from the Feather River Project. Various competing interests may affect this water supply. In addition, the regulations of the State Department of Health Services result in a need to construct a water treatment plant to bring this new water source up to the standards established by Title 22 for domestic drinking water.

6.3.5

Non-Governmental Constraints

The cost of land in the Tehachapi area does pose a constraint to development. Average costs for raw land designated for residential development in the City are approximately \$ 10,000 - \$ 30,000 per acre. The most value is placed on land that may be developed with single family residences that can sell in the range of \$ 100,000 to \$ 140,000 per unit. The demand for multifamily residential property is very low although land is designated for this use. Even in areas where the land is designated for multi-family development the developers generally design conventional subdivisions for 3 and 4 bedroom homes. The only way to preclude the development of multifamily land as single family projects would be to deny the tentative subdivision maps. In the areas where the City has approved subdivisions with lots ranging from 4,500 sq. ft. - 6,500 sq. ft. the developers are designing multi-story homes that still fall in the higher cost ranges. The developers are choosing to meet the market demand which is for conventional homes in the moderate and above moderate income brackets. This is also consistent with the Regional Housing Allocation Plan.

The City has formed Mello-Roos Community Facility districts to finance infrastructure at low costs. These projects are heavily impacted by the poor absorption rates in the area. Over 365 homes are available for purchase therefore the construction industry is reluctant to build new homes when the area is rapidly losing jobs and foreclosures are rising on existing homes. Lenders are reluctant to lend on subdivisions and the City credit is in jeopardy as a result of past assistance to provide low interest loans for housing.

6.4 DEVELOPMENT OPPORTUNITIES

In the previous section, governmental, market, public perception, and infrastructure constraints that sometimes preclude development were discussed. To facilitate development, these constraints need to be modified or eliminated, if possible. However, opportunities are available to the government that could stimulate or maximize the development potential. These opportunities are discussed in the following section.

6.4.1 Energy Conservation

The conservation of natural energy resources has become an important goal at all levels of government. State law governing General Plans incorporates this goal by requiring Housing Elements to include a discussion of opportunities for energy conservation in the local housing stock. Sub-section 4.3.4 of this Element discusses various energy saving opportunities within the City of Tehachapi.

The City of Tehachapi will be undertaking the development of an energy conservation incentive program as a part of their overall

housing programs; this incentive program will be designed initially to address conservation measures in new housing development. Opportunities for installation of energy-saving features in existing housing would be addressed subsequently.

At the present time, the utility companies serving Tehachapi conduct consumer-oriented energy conservation information programs, and some have established awards that recognize builders whose projects meet certain energy efficiency standards. These programs increase community awareness of the need to conserve and protect our energy resources.

6.4.2 New State Land Use Legislation

6.4.2.1 SB 1019 (1991) requires general plan housing elements to include the identification of sites for multi-family rental housing as well as permit zoning for multi-family rental units "by right". The law defines this term to mean the use does not require a conditional use permit except when the proposed project is a mixed use project involving both commercial and residential uses. However, use by right for all rental multi-family residential housing does not preclude or prohibit a local agency from requiring the project to comply with development standards and policies appropriate to, and consistent with, meeting the quantified housing objectives. Nor is the local agency restrained from imposing fees and other exactions otherwise authorized by law that are essential in providing necessary public services and facilities.

SB 1019 amended housing element law to extend the deadline for local governments to amend their housing elements to include an analysis and programs to preserve assisted housing at risk of converting to non-low income uses. The due date for adopting the housing element amendment was extended from January 1, 1992 to July 1, 1992.

6.4.2.2 SB 2274 (1990) revises the regional housing allocation process to require jurisdictions to plan for their share of housing as determined by the Council of Governments following a public hearing if requested by the local jurisdiction. In addition, it allows counties to transfer their share of housing to cities within the county upon mutual agreement and strengthens the housing element review process by requiring HCD to review both draft and adopted local housing elements for substantial compliance with housing element law and make written findings to the agency. The local jurisdiction must amend the draft housing element, taking into consideration HCD's findings or make findings as to why they believe they are in substantial compliance with the law. Further revision to the statute (Section 65400(b)) now requires local planning agencies to include in their

annual report to the legislative body their progress on meeting their regional housing need as a part of the status of the general plan and implementation.

6.4.2.3 **SB 2011 (1991)** in Section 65589.5(d) of the Government Code, prohibits a local agency from disapproving a housing development project "affordable to low- and moderate-income households" or conditioning approval in a manner that renders the project infeasible for development for the use of low- and moderate-income households unless it finds, based upon substantial evidence, one of six exceptions. The exceptions are broadly defined as:

- (a) The project is inconsistent with the general plan land use designation as specified in any element of the general plan as it existed on the date the application was deemed complete, and the jurisdiction has adopted a housing element meeting legal requirements for the housing element.
- (b) The jurisdiction has adopted a housing element and meets its fair share requirements.
- (c) The project has an adverse impact on public health or safety.
- (d) The project conflicts with state or federal law.
- (e) The project increases concentration of affordable projects in highly impacted areas.
- (f) The project is proposed on land zoned for agriculture or resource preservation.

6.5 SITE EVALUATION CRITERIA

Housing plans and specifications are subject to requirements imposed by the City. Additional requirements are sometimes in effect when funding comes from public agencies such as the Department of Housing and Urban Development (HUD) or the Farmers Home Administration (ad). In addition to the City's development requirements, HUD has specific standards in regard to neighborhood composition, accessibility to services and availability of public transportation. ad development standards are primarily concerned with on-site improvements that must be satisfied prior to the approval of funding for a project. The Kern County Community Development Program Department follows standards set forth by the funding agency, as well as their own and those of the City where the project is located. The standards set forth by HUD and ad are outlined below.

6.5.1 Department of Housing and Urban Development Standards

Proposed sites for new construction projects must meet the following standards for approval from HUD:

- a. The site must have an adequate size, exposure and contour to accommodate the number and types of units proposed. Adequate utilities (water, sewer, gas and electricity) and streets must be available to service the site.
- b. The site and neighborhood must be suitable from the standpoint of facilitating and furthering full compliance with the applicable provisions of Title VI of the Civil Rights Act of 1964, Title VIII of the Civil Rights Act of 1968, Executive Order 11063, and HUD regulations issued pursuant thereto.
- c. The site must not be located in:
 1. An area of minority concentration, unless: (a) sufficient, comparable opportunities in the projected income range exist for minority family housing outside minority concentrated areas, or (b) the project is necessary to meet overriding housing needs that cannot otherwise feasibly be met in the housing market area. An over-riding need may not serve as a basis for determining that a site is acceptable if the only reason the need cannot be met is that discrimination on the basis of race, color, religion, creed, sex, national origin or marital status renders sites unavailable outside areas of minority concentration.
 2. A racially mixed area if the project will cause a significant increase in the proportion of minority to non-minority residents in the area.
- d. The site must promote greater choice of housing opportunities and avoid undue concentration of assisted persons in areas containing a high proportion of low-income persons.
- e. The site must be free from adverse environmental conditions, natural or manmade, such as instability, flooding, septic tank back-ups, sewage hazards, or mudslides; harmful air pollution, smoke or dust; excessive, noise, vibration, or vehicular traffic; rodent or vermin infestation; or fire hazards. The neighborhood must not be one that is seriously detrimental to family life or in which substandard dwellings or other undesirable elements predominate, unless a concerted program to remedy the undesirable conditions is actively in progress.

- f. The site must comply with any applicable conditions in the local Housing Assistance Plan approved by HUD.
- g. The housing must be accessible to social, recreational, educational, commercial, and health facilities and services, and other municipal facilities and services that are at least equivalent to those typically found in neighborhoods, consisting largely of unassisted, standard housing of similar market rents.
- h. Travel time and cost via public transportation or private automobile, from the neighborhood to places of employment providing a range of jobs for lower income workers, must not be excessive. (While it is important that elderly housing not be totally isolated from employment opportunities, this requirement need not be adhered to rigidly for such projects.)
- i. The project may not be built on a site that has occupants unless the relocation requirements referred to in Section 880.209(a) are met.
- j. The project may not be built in an area identified by HUD as having special flood hazards and in which the sale of flood insurance has been made available under the National Flood Insurance Act of 1968, unless the project is covered by flood insurance as required by the Flood Disaster Protection Act of 1973, and it meets any relevant HUD standards and local requirements.

6.5.2 Farmers Home Administration Standards

Proposed sites for new construction must meet the following ad requirements:

- a. The site must have good drainage and be provided with sewer, water, power and garbage collection services.
- b. There must be at least two points of access to the site.
- c. Cul-de-sacs must have turning room for safety vehicles.
- d. Community standards for streets will be upheld at the minimum.

6.6 Site Specific Information

This section identifies specific sites available for development or housing of persons in the four different income groups discussed throughout this Housing Element. The City needs to provide for 306 housing units for Very Low Income people and 196 housing units for Low Income people. The reason these figures differ from those in other sections of this Element is that the City has been implementing this Element in draft form during the several years of preparation. Table 6-3 identifies the 102 vacancies of low and 69 vacancies of very low income housing in the City. As shown in this table the City has available vacant housing for these two groups therefore a reduction should be made in the number of new housing units that should be constructed. Figure 6.1 depicts 113 manufactured home spaces available for the placement of low income housing units.

Figure 6.2 depicts 45 acres of land and Figure 6.12 depicts 8.21 acres of land available for construction of low and very low income housing at a density of 16 dwelling units per acre. This land can provide for low or very low income housing depending on market demand. These areas are served with sewer and water lines but the area in Figure 6.2 does not have paved access at this time. Development of this area will require improvements to the Mulberry Street sewer trunkline. Upon adoption of the General Plan Update and EIR the City will initiate construction of the street to serve this area. The area shown on Figure 6.12 has full utility service at this time. Additional street improvements must be constructed east of the intersection of Challenger Dr. and Athens St.

The City needs to provide for 221 housing units for moderate income residents and 613 housing units for above moderate income residents. Currently there are approximately 200 vacant recorded residential lots in the City to provide for these two income groups. Figures 6.3 - 6.8 depict the majority of these vacant recorded parcels that are available for moderate and above moderate income housing.

In addition to the previously listed recorded lots there are 508 lots approved. These tentative tract maps are depicted on Figures 6.9, 6.10 and 6.11. It is expected that these parcels will be developed with moderate and above moderate income housing units.

Based on the site specific survey the City still needs to provide for 237 very low income residents. There is sufficient land available to construct 851 housing units (see Figures 6.2 & 6.12) that could satisfy this demand, provided that the projects are developed to maximum potential and a sewer capacity improvement is made in the Mulberry Trunk and a paved street is constructed. The City has approved and/or recorded lots for 708 units of moderate and above moderate income housing. These units are a combination of the recorded and tentative tracts previously identified and depicted in Figures 6.3 through 6.11. The City needs to provide for an additional 126 units of moderate and above moderate income

housing. These figures do not depict several individual lots located throughout the City. These lots will be developed at unspecified times primarily as retirement homes for owners who purchased the land in the past for this purpose.

TABLE 6.3

RESS	DESCRIPTION AND AMENITIES	# OF UNITS	# OF VACANT	% VACANT	BDRM	BATH	GARAGE	CAR-PORT	W/O HOOK UPS	COIN OP	FENCED YARD PATIO	APPROX. AGE	CONDI-TION	LOW/VERY LOW	SECURITY	RENT	MOVE IN INCENTIVES
6423 MAPLE	BLOCK OF DUPLEXES, BIG FENCED YARDS, STOVE	18	3/15/93 6	33%	2	1	SINGLE	NO	YES	NO	YARD	25	AVG.-	VERY LOW	\$200	\$345	1/2 OFF 1ST MO. RENT
2. DUPLEXES UT GARAGES	SPREAD AROUND TOWN. MOST HAVE BIG YARDS, STOVE, SOME REFRIGERATORS	10	3/15/93 2	20%	2	1	NO	NO	YES	NO	YES	25	AVG.	VERY LOW	\$200/ \$300	\$350/ \$400	
2. DUPLEXES H GARAGES	SPREAD AROUND TOWN. MOST HAVE BIG YARDS, STOVE, SOME REFRIGERATORS	18	3/15/93 0	0%	2	1	SINGLE	NO	YES	NO	YES	25	AVG.	VERY LOW	\$200/ \$300	\$375/ \$400	
441 SO MILL ST	14 UNIT COMPLEX, DUPLEXES, TRI-PLEX & 7 PLEX, PRIVATE YARDS NICE SETTING, STOVE, DISHWASHER	7	3/15/93 1	14%	2	1 & 1 1/2	NO	NO	NO	YES	YES	13	AVG. +	VERY LOW	\$250	\$350/ \$375	
441 SO MILL ST	" " STOVE, REFRIGERATORS	7	3/15/93 0	0%	1	1	NO	NO	NO	YES	YES	13	AVG. +	VERY LOW	\$200	\$275/ \$325	
TON APTS. LEY BLVD.	4 - 4 PLEXES, 1 - 6 PLEX COMMUNITY YARDS, SOME BALCONIES, STOVE	22	3/15/93 9	41%	2	1	NO	YES	NO	YES	NO	15-20 ?	AVG.	VERY LOW	\$200	\$345	1/2 OFF 1ST MO. RENT
MARON RRY LANE S.	NOT MAINTAINED, SOME CONDEMNED UNITS, SOME 1 & 3 BEDROOM, STOVE, DISHWASHERS	56	2/1/93 48	86%	2 SOME 3	1 1	NO	YES	NO	YES	NO	5-7	POOR	LOW		\$425 2 BDRM	
HARD NO MILL FWY.	POOL - SMALL UNITS - 700 SQ. FT., STOVE, SM. PET OKAY	85	2/1/93 40	47%	2	1	NO	SOME	NO	YES	PATIO	5-7	AVG.	VERY LOW	\$350 \$100 PET	\$350	
RA VISTA TED FARM RKERS RRY LANE	NICE UNITS, SPANISH STYLE, STOVE, DISHWASHER	56	2/1/93 26	46%	2	1	NO	YES	NO	YES	NO	2+	GOOD+	LOW	\$300	\$435	DEP. ONLY MOVES YOU IN 6 MO. LEASE
N. COMFORT LA - CURRY ST. FIRE STATION	850 SQ. FT., CABLE PAID, STOVE, DISHWASHER, REFRIGERATORS, MICROWAVE, LOCKED GATE, NICE UNITS	64	3/1/93 15	23%	2	1	NO	NO	YES	NO	YES	4	GOOD+	LOW	\$300 \$150 PET	\$465	NO CREDIT CHECK
IAN CREEK LA - TUCKER RD	FIREPLACE OR WOOD BURNING STOVE, DISHWASHER, STOVE 8-1 BDRMS, INCLUDED IN TOTAL	72	2/1/93 13	18%	2	2	NO	YES	NO	YES	NO	6-8	GOOD	LOW	\$300	\$439	\$199 FIRST MO. RENT
RRA RIDGE EEN STREET	POOL, EXTRA NICE, PLUSH GREEN SETTING, STOVE, DISHWASHER	72	2/1/93 7	10%	2	1	NO	YES	YES SOME	YES	DECKS OR SMALL PATIO	6	EXCEL	LOW	\$300 \$200 PET	\$455	1/2 OFF 1ST MO. RENT
S UNDEN CT.	OLDER VERY PLAIN UNITS	10	3/15/93 4	40%	1	1	SOME	NO	NO	YES	NO	25	AVG.-	VERY LOW	\$200	\$300/ \$310	1/2 OFF 1ST MO. RENT
	TOTALS	497	171	34%													

FINAL SURVEY: DATA COLLECTED BY FOUR SEASONS REALTY AND CHRIS GRIMES (CITY PLANNER) ALL UNITS ARE WITHIN CITY LIMITS & APPROX. 800 SQ. FT. UNLESS NOTED.

MT. AIRE ESTATES MOBILE PARK

AVAILABLE FOR LOW INCOME HOUSING \$ 428 - \$ 683 / MONTH



FIGURE 6.1

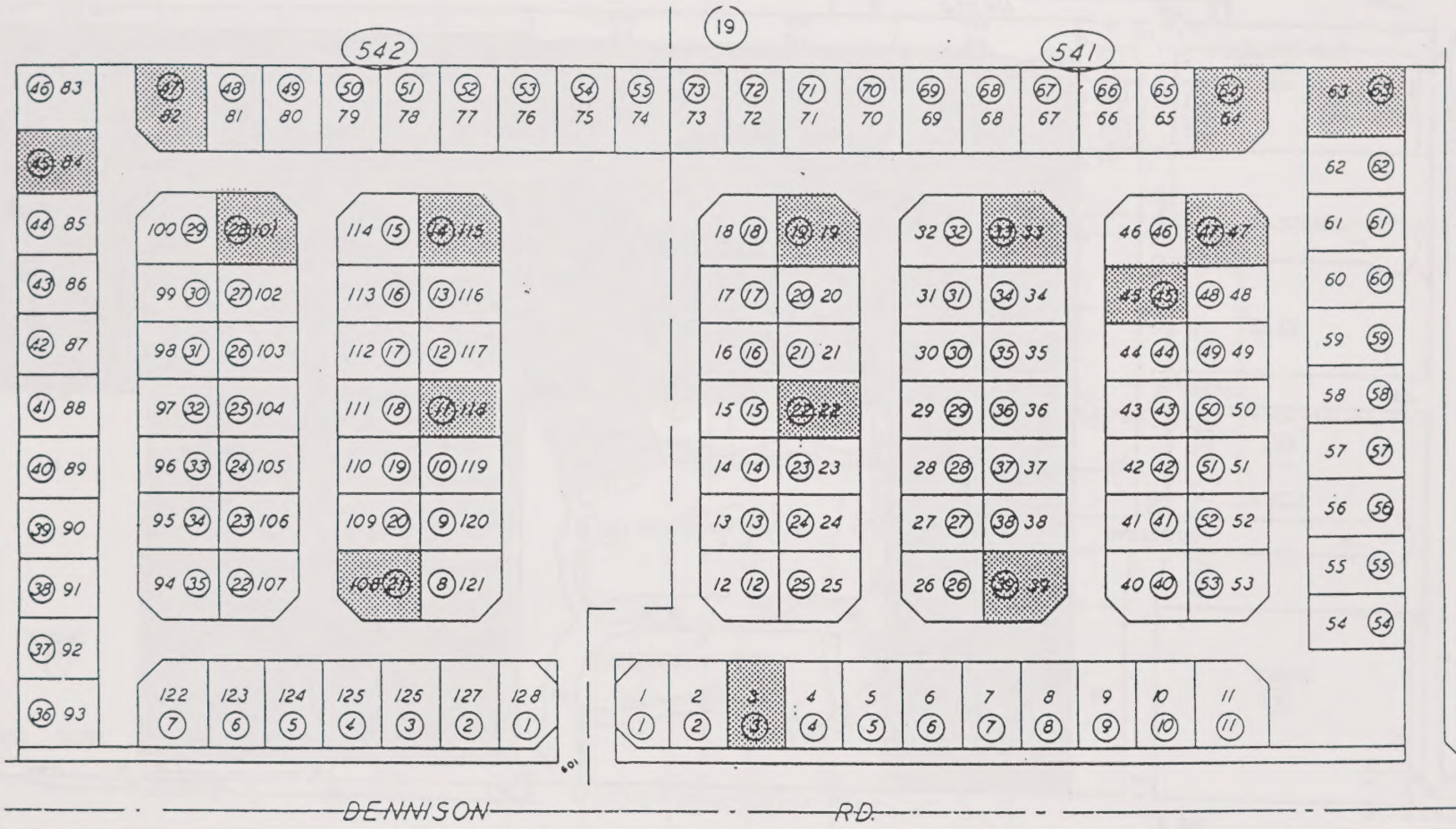




FIGURE 6.3

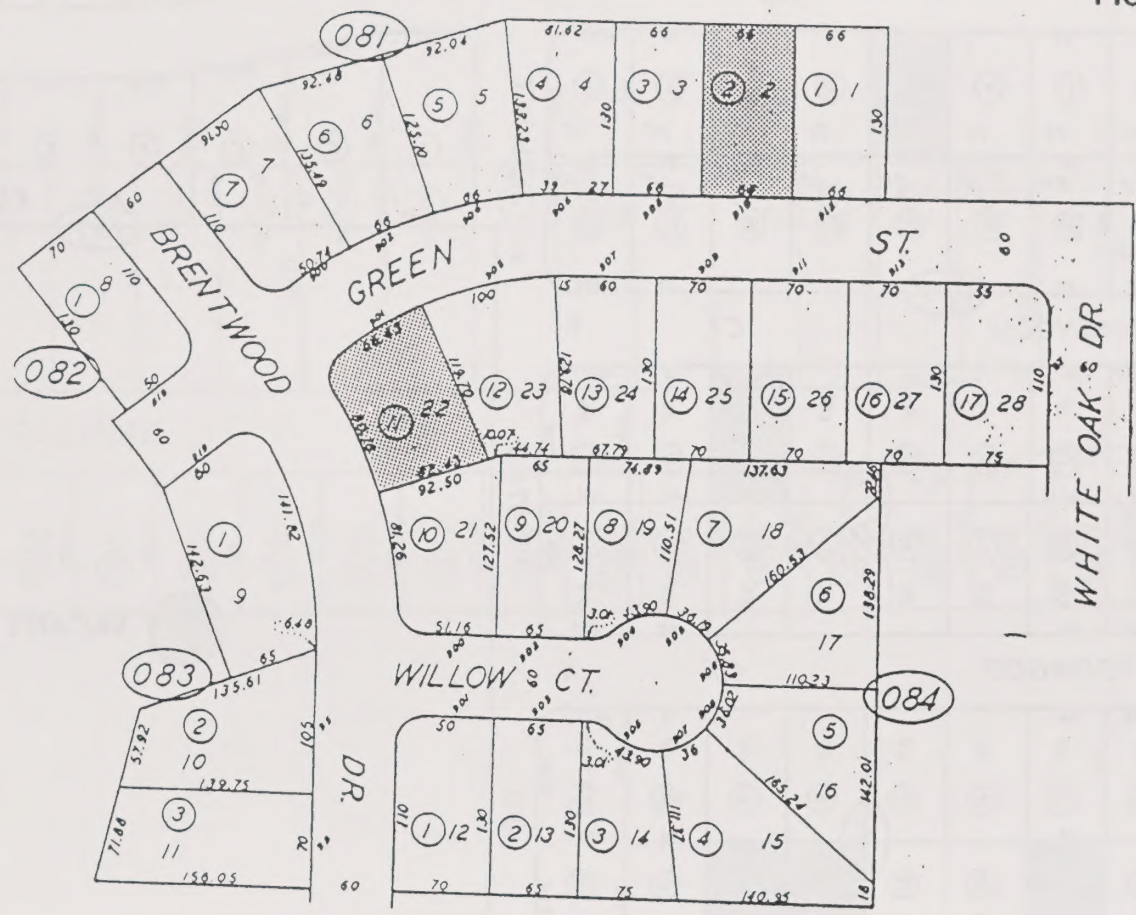
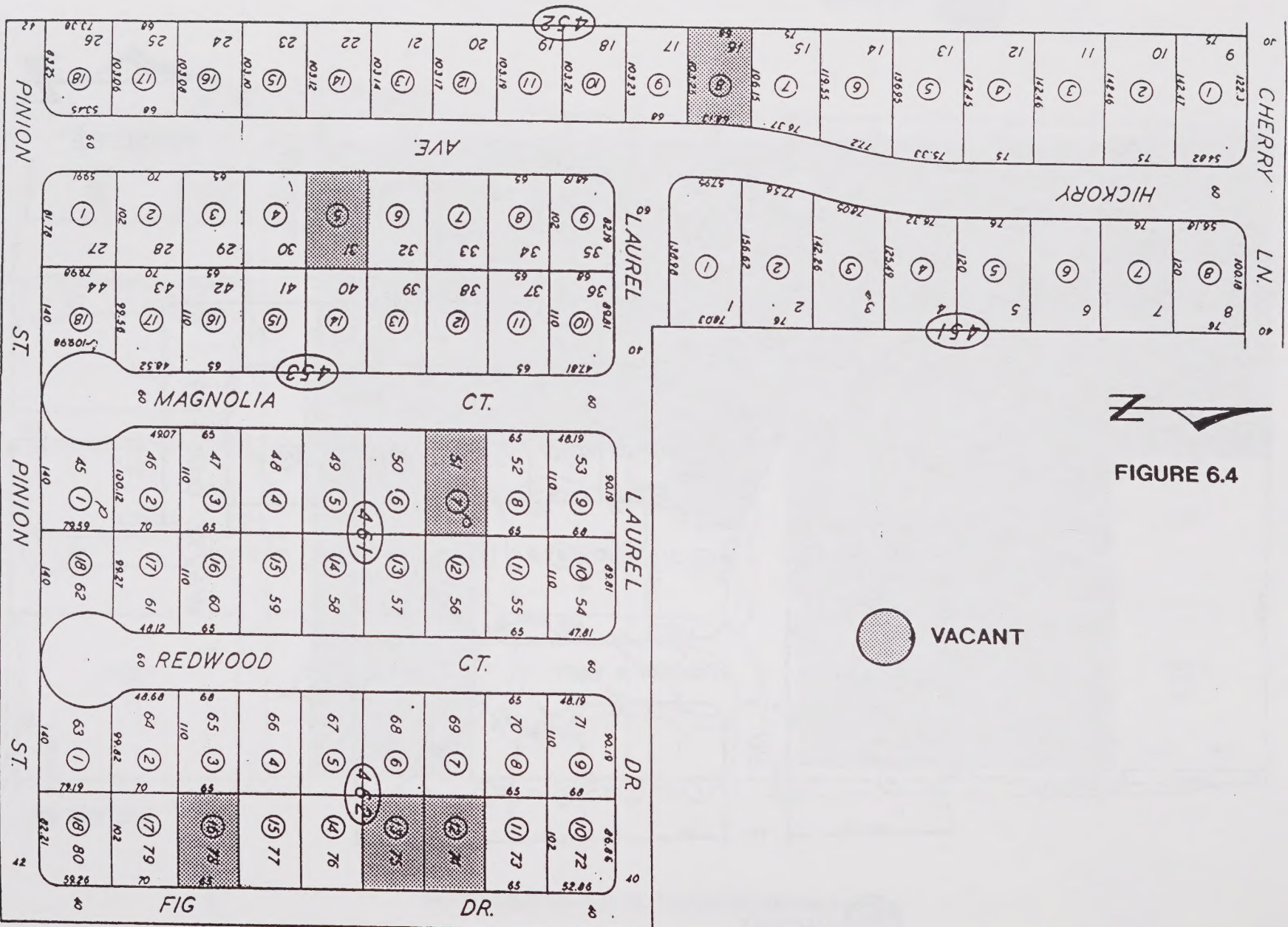




FIGURE 6.4



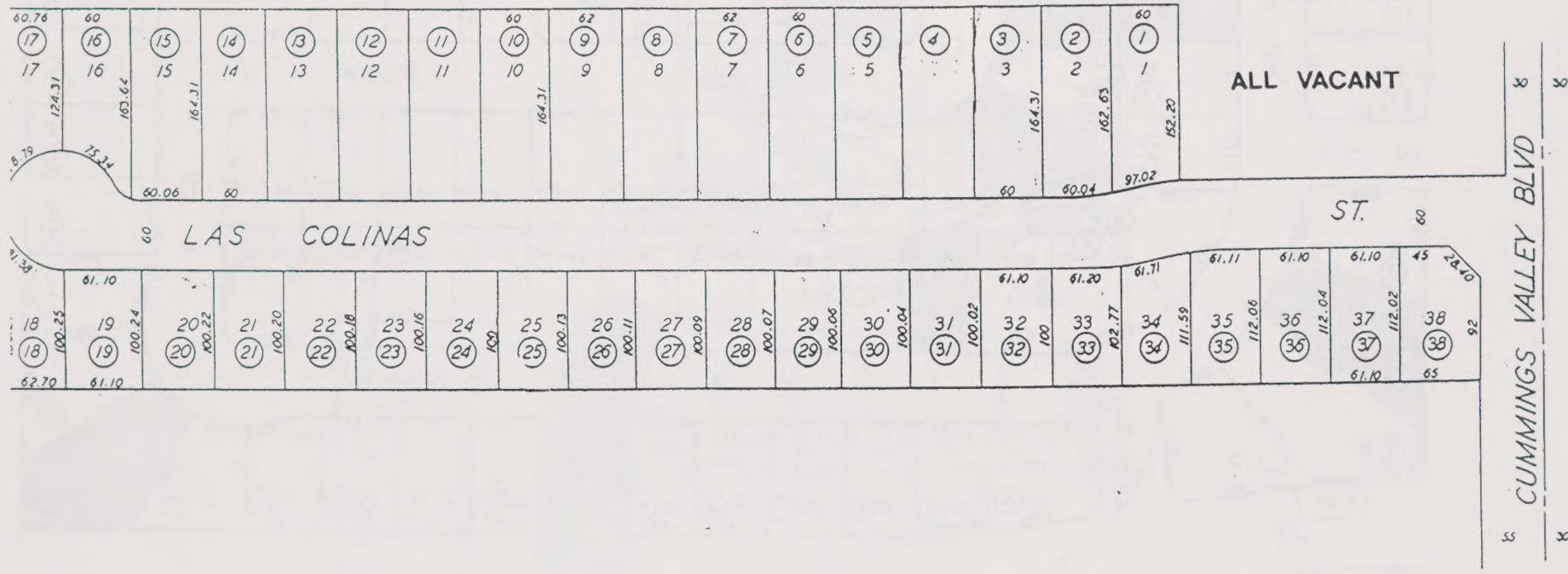
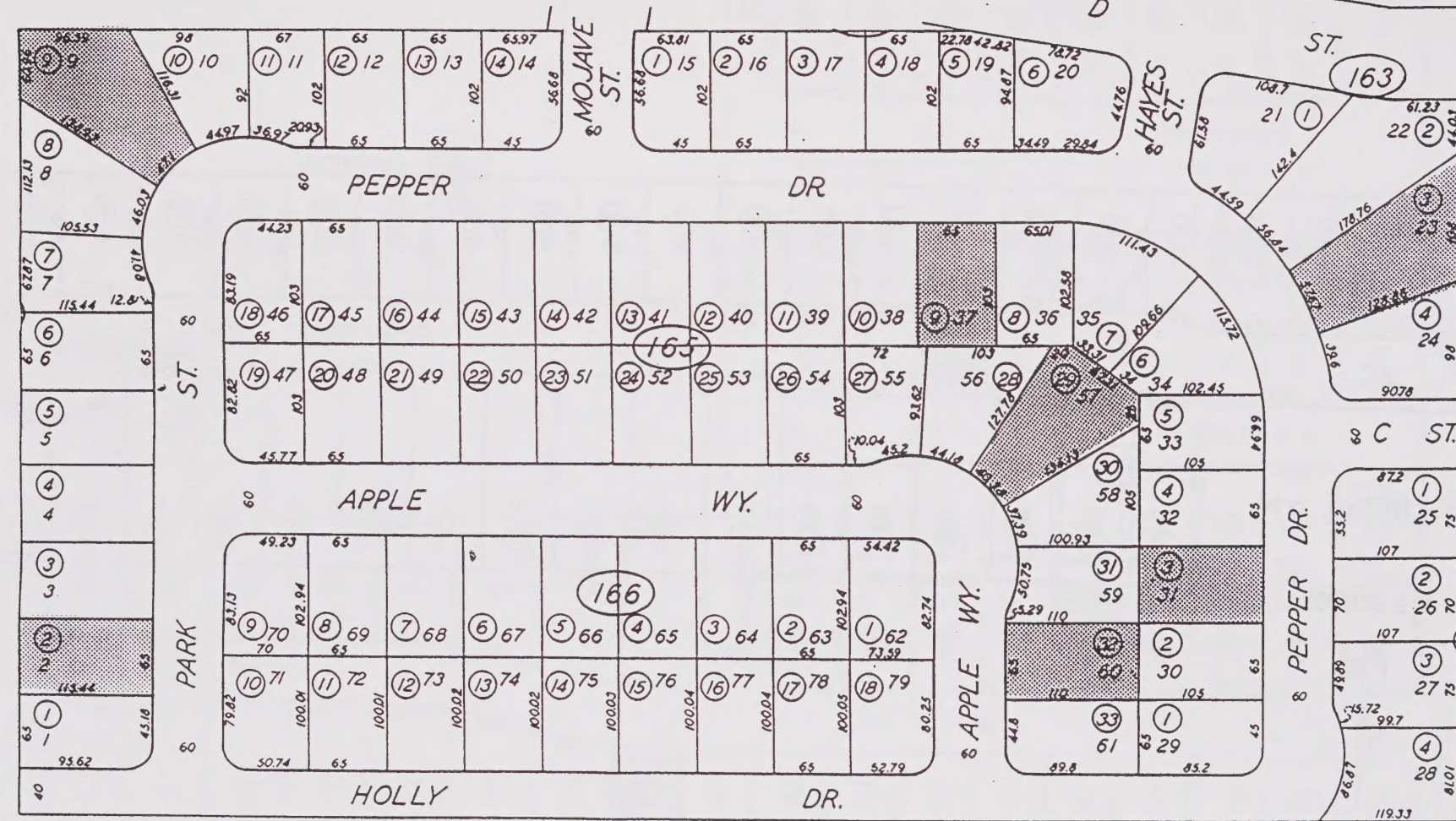


FIGURE 6.5

FIGURE 6.6



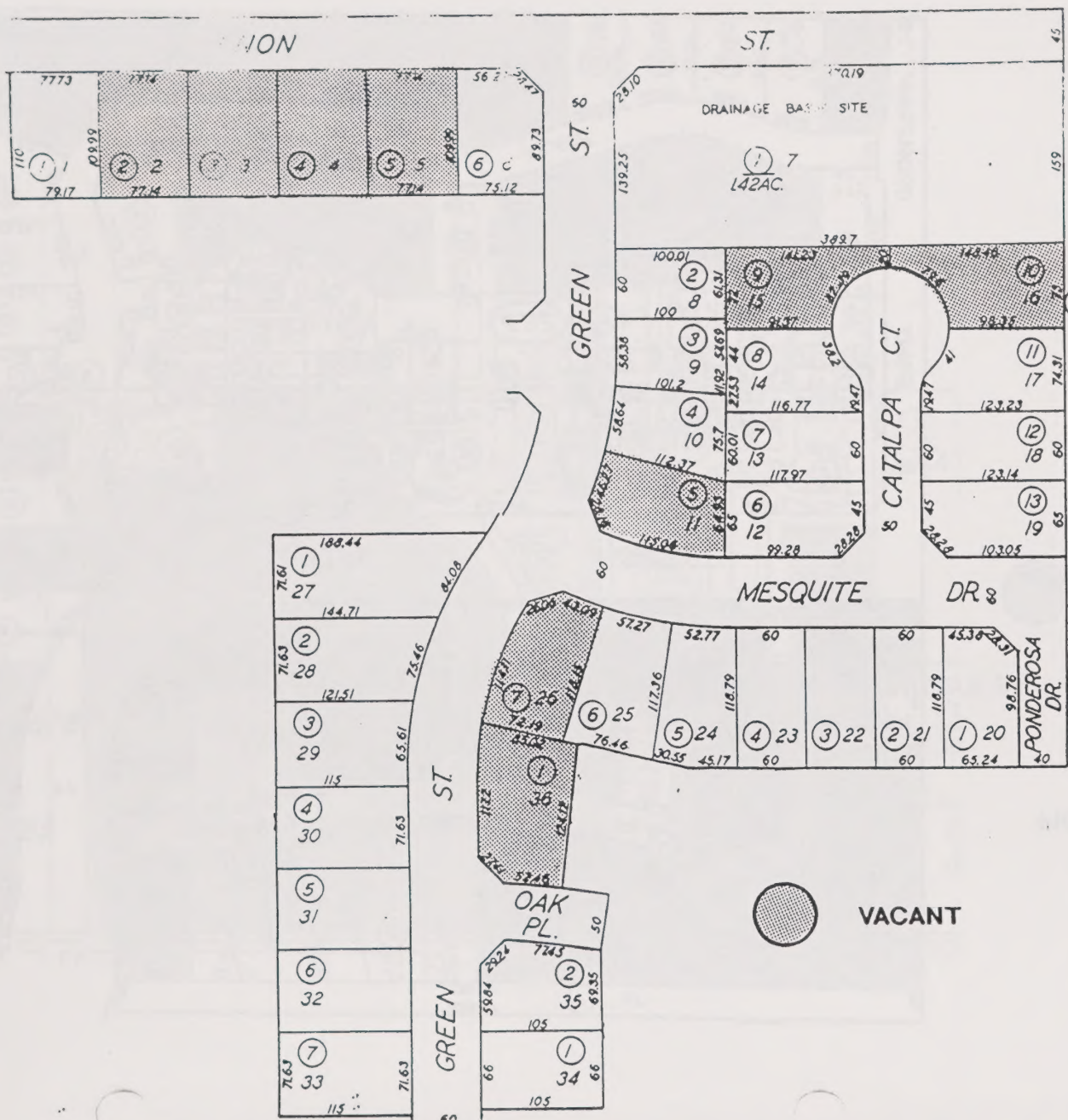
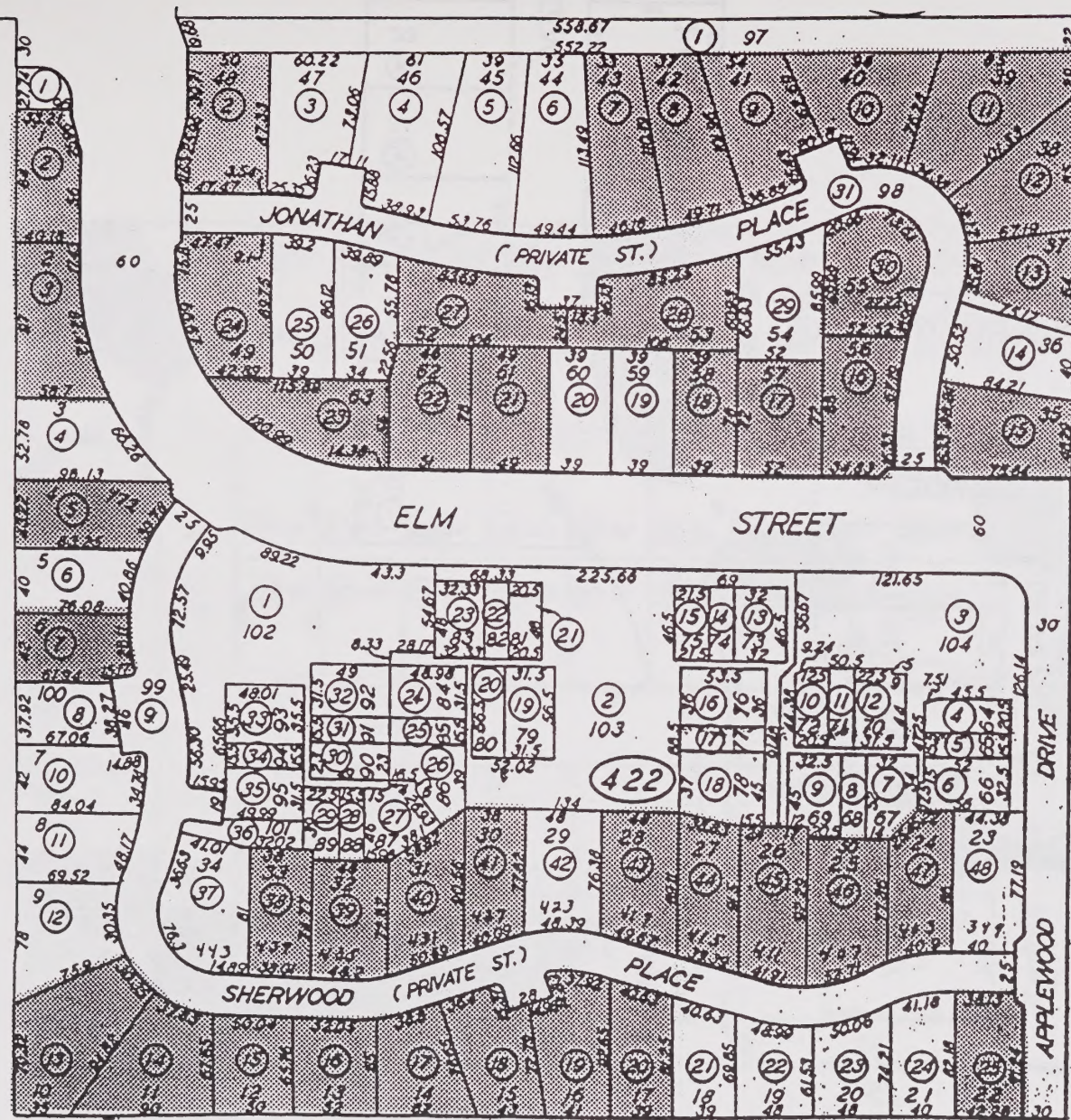


FIGURE 6.7



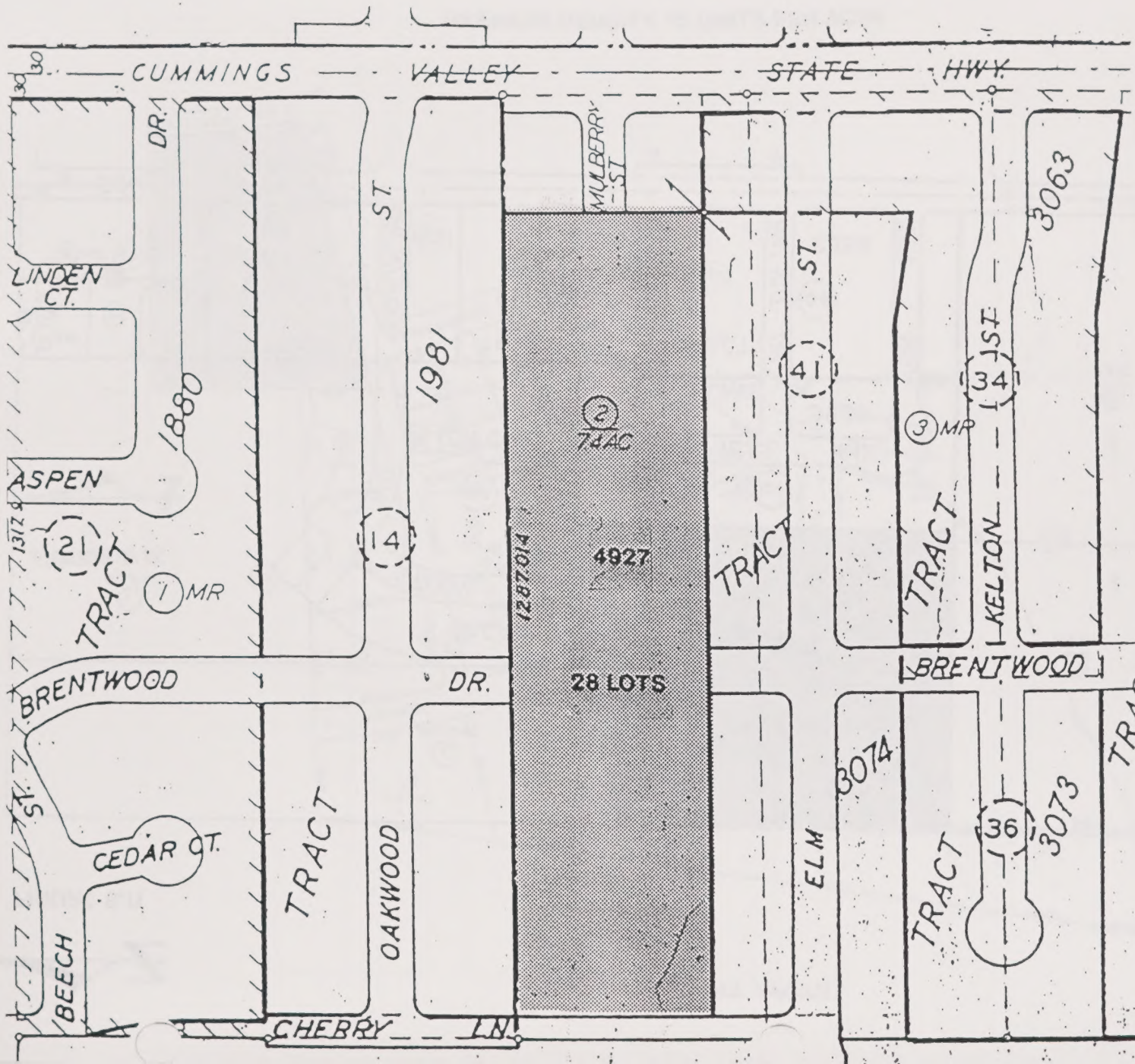
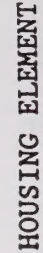


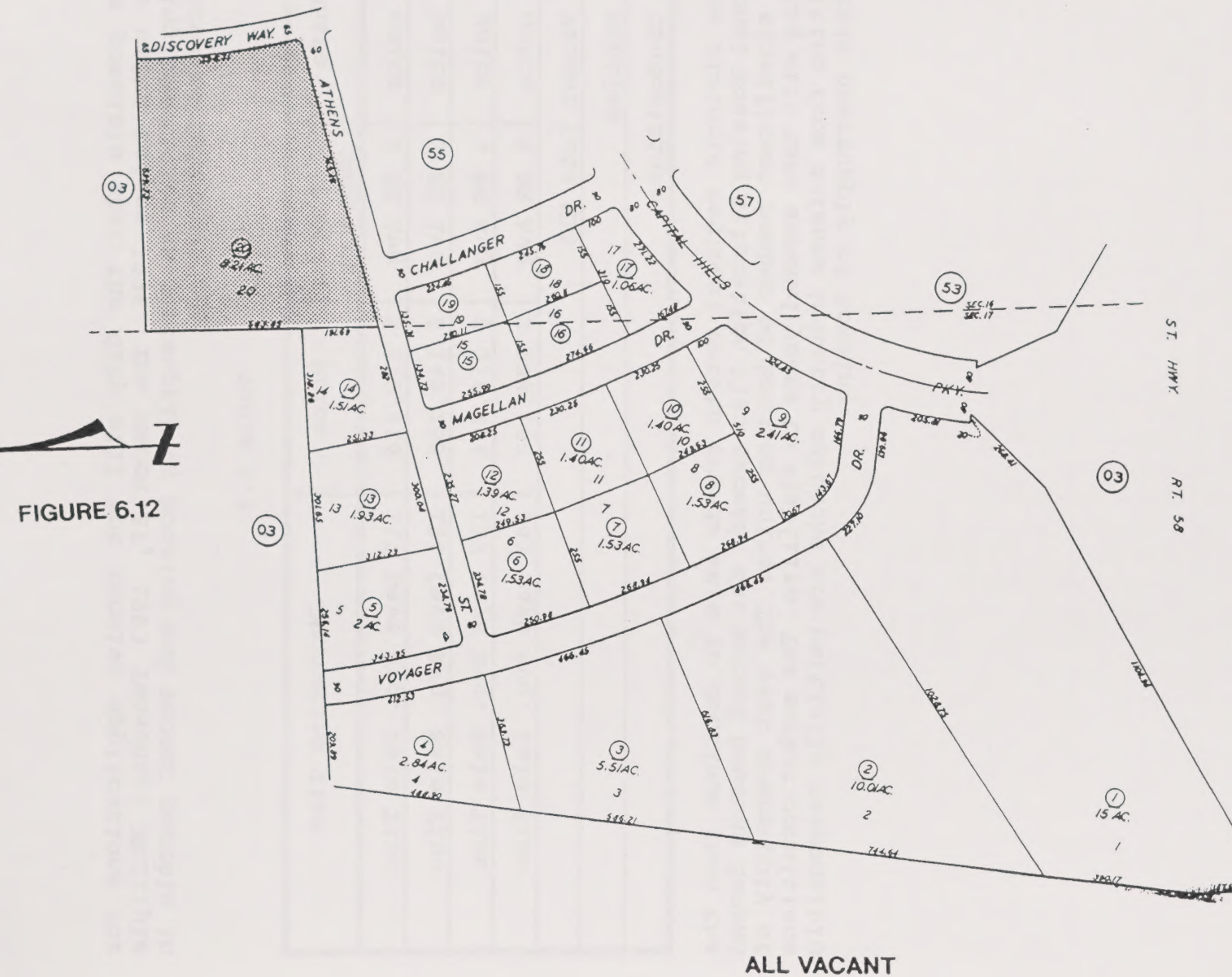
FIGURE 6.10



FIGURE 6.11



MAXIMUM DENSITY 16 UNITS PER ACRE



It is possible that the City will not receive applications for these units before 1996. The March 17, 1993 Tehachapi Multiple Listing identifies an oversupply of housing and vacant parcels in the area as follows.

Table 6.4

Units	# of Bedrooms	Price	Marketing Time
42 units	2 BR Avg	\$ 132,816	117 Days Avg. Sale Time
276 units	3 BR Avg	\$ 149,253	134 Days Avg. Sale Time
68 units	4 BR Avg	\$ 216,294	127 Days Avg. Sale Time
9 units	5 BR Avg	\$ 278,167	143 Days Avg. Sale Time
847 Vacant Lots MLS			
32 Mobiles			
13 Condominiums			

If the historic regional growth trends were to continue then the Regional Housing Allocation Plan exceeds the actual housing demand by a significant number of housing units. The vast oversupply of housing will take several years to stabilize. The market conditions resulting from defense industry cutbacks are partially responsible for this oversupply of housing.

The dynamic nature of the housing market and the local and national housing delivery systems have gained an increasingly high profile in recent years. If the Housing Element is to serve as an effective guide to the City for meeting the housing needs of its citizenry, periodic evaluation and updating of the Element is essential. This chapter presents a methodology for maintaining the currency of the document. This includes periodic evaluation of the effectiveness of programs, annual review of the status of the plan and its application, and an extensive updating of the entire Housing Element every five years.

7.1 ANNUAL REVIEW

Chapter 4 presents the overall housing program for meeting the City's housing needs. It consists of a statement of the City's housing policies, selected programs to achieve each policy and an overall strategy, for using these programs to meet the identified needs. The problems that the overall program tries to address are constantly changing; therefore, it is important to periodically evaluate the program's effectiveness and make appropriate changes. This can be accomplished effectively as part of the annual report to the City Council on the status of the General Plan (including each of its elements) and progress in its application as required by Section 65400 of the Government Code.

To evaluate the effectiveness of the selected programs, the City will consider the following factors: acceptability and adaptability to the local situation; current level and availability of funding; changing community needs and priorities; changing priorities for use of City staff and funds; changes in the housing market; and the availability of new federal, state or locally administered programs. Citizen participation and public hearings in the evaluation process, such as that used during Element preparation, is important to maintaining the desired level of responsiveness to the needs of all economic segments of the community.

Maintaining an accurate count of the housing inventory not only by type of unit, but by building condition, is essential to evaluating program effectiveness. By monitoring and estimating changes in the inventory according to the applicable housing programs, the City will be able to determine which programs have been most effective. This will facilitate an evaluation of why or why not a selected program has been effective and whether or not the program is still relevant to meeting local housing needs.

Figure 7-1 presents a tracking system of changes in housing inventory. The selected programs are arranged according to the three strategy areas: conservation, rehabilitation, and new construction. Space has been provided following each program to enter units added or improved through each program's application on

Figure 7-1

HOUSING ELEMENT PROGRAM EVALUATION FORM

Programs		1979			1980			1981			1982			1983			1984			1985		
New Construction - Units Added						D			G			G			G			G			G	
A	B					C			C			C			C			C			C	
Rehabilitation - Units Improved						H			L			L			L			L			L	
A	B					C			C			C			C			C			C	
Conservation - Units Maintained						M			P			P			P			P			P	
A	B					C			C			C			C			C			C	
TOTALS		Annual Objective	Units Added	Remaining Need	Annual Objective	Units Added	Remaining Need	Annual Objective	Units Added	Remaining Need	Annual Objective	Units Added	Remaining Need	Annual Objective	Units Added	Remaining Need	Annual Objective	Units Added	Remaining Need	Annual Objective	Units Added	Remaining Need
New Construction							D	D	E	F	G	E	F	G	E	F	G	E	F	G	E	F
Rehabilitation							K	H	I	J	L	I	J	L	I	J	L	I	J	L	I	J
Conservation							M	M	N	O	P	N	O	P	N	O	P	N	O	P	N	O

an annual basis. Space is also provided to enter numbers reflective of cumulative progress toward meeting overall housing needs. An important element of using this exercise to monitor effectiveness in meeting housing needs is that, as units are rehabilitated or are added by new construction, they become eligible for conservation programs. Conversely, sound housing units that are not properly maintained can become eligible for rehabilitation programs.

If federal and state programs are developed to assist localities in providing housing or if programs are reduced, it is essential that the City expand or contract their policies and programs to include those which "fit" the local situation. Likewise, as greater awareness of local housing needs develop in the community, additional programs of a local nature can be developed at little or no cost to the City or its citizens. Identification of new programs should occur annually, as well. Market rate units developed by the private sector contribute to the housing supply, and have been considered in the housing needs analysis. While not a specific recommended program, space has been provided to report market rate units so that their impact on remaining housing need can be monitored and the annual objective adjusted to reflect the private sector contribution to the housing supply.

An example form has been included as Appendix B to further clarify the recommended approach for monitoring changes in the City's housing inventory.

7.2 PROGRAM EVALUATION FORM GUIDELINES

The Program Evaluation form will be used in the annual review of the programs identified in the Housing Element. Following each letter below (which corresponds to a letter of the Sample Evaluation Form) is a brief description of the contents of that space and any accompanying formulas.

- A. The program number from the Housing Element
- B. The program name from the Housing Element
- C. The number of units added, improved or maintained annually through each program (can be zero (0))
 - 1. The number of units added, through new construction programs, each year
 - 2. The number of rental units added, through new construction, each year
- D. The annual objective for units to be added under the new construction programs in 1990, as identified in Chapter 4.0 of the Housing Element.

- E. The total number of units added through the new construction programs each year, as well as those developed by the private sector (market rate units).
 - F. The remaining need for new units. This can be calculated by subtracting units added (E) from the annual objective (D) ($D - E = F$) in 1990 and by subtracting E from G thereafter ($G - E = F$). If the annual objective has not been met, the remaining need will be incorporated into the next year's annual objective. Conversely, if more units are constructed than anticipated, fewer units will have to be built the next year.
 - G. The annual objective for 1991-96 can be calculated by adding the annual objective for the base year (D) to the remaining need (F) ($D + F = G$). The annual objective for the base year applies to all subsequent years since it was derived by dividing the projected need for new units through 1996 by the number of years this Housing Element is to be implemented.
 - H. The annual objective for units to be improved through rehabilitation identified in Chapter 4.
 - I. The total number of units improved through rehabilitation programs that year.
 - J. The remaining need for rehabilitation can be calculated by subtracting I (units added) from the annual objective (H) and then subtracting the resulting number from the total number of units requiring rehabilitation (K) ($(H-I)-K = J$).
 - K. The total number of units requiring rehabilitation in the base year. The source of this number is minor plus major rehabilitation of units, as discussed in Chapter 3 - Housing Need.
 - L. The annual objective for units requiring rehabilitation may fluctuate from year to year depending on the success of programs and the availability of funding. An annual objective through 1996 has been established in Chapter 4. However, this figure can be updated by subtracting the units improved (I) from the annual objective that year (H in 1990, L thereafter), and then adding that number to the annual objective for the base year (H). For 1990, the formula was $(H-I+H)=L$. For 1991 through 1996, the formula is $(L-I+H)=L$.
- Note: Any units that have not been maintained should be added as well; (M-N) for 1990 = units not maintained; (P-N) for 1991 through 1996 = units not maintained.
- M. The annual objective for units requiring construction. This number is equal to the total number of standard units in the base year 1990, or remaining need (see Chapter 3).

- N. This is the number of units maintained or kept in standard condition annually through conservation programs.
- O. Remaining need can be calculated by subtracting N from M in 1990, or N from P for all years thereafter.
- P. The annual objective for conservation should be equal to the number of units in standard condition, or $N+E+I$. Not all of the units rehabilitated (I) may be standard, however, so care will be taken to include only those units that are improved to standard condition.

7.3 UPDATE REQUIREMENTS

According to the Government Code Section 65588, it is the responsibility of the local legislative body (City Council and Planning Commission) to determine the need for changes or amendments to the Housing Element. Because of the dynamic nature of housing supply and demand, Housing Element legislation requires that the Housing Element must be updated at least every five years.

The law stipulates that Housing Element reviews must evaluate the following:

1. The appropriateness of the housing goals, objectives and policies in contributing to the attainment of the State housing goal.
2. The effectiveness of the Housing Element in attainment of the community's housing goals and objectives.
3. The progress of the City and/or County in implementation of the Housing Element.

By tracking program implementation and changes in housing conditions on an annual basis, the planning staff will be better able to advise the City Council and the Planning Commission of the need for significant revisions to the Housing Element when the need arises. Such an effort will better enable the City to meet the housing needs of all economic segments of the community.

APPENDIX A

GLOSSARY OF TERMS

Adequate Housing Sites: Locations designated for housing that combine a range of housing types, size, and prices that will respond to the needs of all economic groups within the community.

Annexation: Process through which a city incorporates additional land.

Apartment: A building, or portion thereof, designed for or occupied by three or more families living independently of each other.

Building Setback Line: The minimum distance as prescribed by the City Zoning Ordinance between any property line and the closest point of a building.

Building Condition Classification:

Standard Unit: An housing unit in good condition with no rehabilitory work needed.

Minor Rehabilitation: An housing unit in need of minor repairs such as painting, landscaping, or plumbing repair.

Major Rehabilitation: An housing unit with visual, structural, or foundational damage in need of major rehabilitory work.

Demolition: An housing unit in poor condition which is unsuited for rehabilitation.

Conservation: Ongoing maintenance of standard housing units to prevent deterioration.

Density: The number of housing unite per gross acre of land.

Dilapidated: Highly deteriorated buildings with major structural deficiencies that are not economically feasible to repair.

Disabled: Persons with a physical impairment or mental disorder expected to last a long time or indefinitely, whose ability to live independently could be improved by more suitable housing conditions.

Dwelling: A building or portion thereof designed for or occupied for residential purposes, including single-family, duplex and multi-family dwellings.

Single-family: A detached building designed for or occupied exclusively by one family.

Duplex: An attached building designed for or occupied by two families living independently of one another.

Multi-family: A building or portion thereof, designed for or occupied by three or more families living independently of each other.

Mobile Home: A semi-permanent dwelling unit which is factory built and transported to a lot. Usually 400 square feet or more and not intended for use as a travel home.

Dwelling Unit: One or more rooms in a dwelling, apartment house or apartment hotel designed for or occupied by one family for living purposes and not having more than one kitchen.

Elderly: Persons 62 years of age or older.

Goal: An ultimate purpose or end toward which effort is to be directed. As a value statement, it is general in nature and immeasurable.

Growth Management: A city strategy to direct the pattern of development and establish the quality of new development in keeping with city needs and desires. A number of means have been used to accomplish this, including the extension of service lines to the areas where growth is desired and annual building permit ceilings.

Household: All persons occupying a single dwelling.

Housing Assistance Plan: A written plan prepared by a locality to obtain federal housing funds. The Housing Assistance Plan must survey the condition of the housing stock; specify an annual goal for the number of residential units or persons to receive federal funds for housing; and indicate the general locations of proposed housing for lower-income persons.

Housing Element: An adopted element of the General Plan on housing required by State law for every city and county in California. An Housing Element must consist of standards and plans for the improvement of housing; provide for adequate sites for housing; and adequately provide for the housing needs of all economic segments of the community.

Infill: Development on vacant land that is surrounded by previously developed areas.

Large Family: A family of five (5) or more persons residing together.

Low-Income Household: A household whose income does not exceed 80 percent of the median household income of Kern County.

Major Rehabilitation: Deteriorated buildings needing extensive repairs to meet reasonable standards of housing and where continued neglect will result in structural damage.

Market Area: A regional area within which economic and social forces interact to provide housing, employment, and service opportunities.

Market Rate Households: Those households who are financially capable of providing adequate housing for themselves without sacrificing other essential needs (such as food, clothing, transportation, etc.).

Minor Rehabilitation: Buildings in fair condition needing one or more repairs to meet reasonable standards of housing.

Mobile Home Park: Any area or tract of land where one or more mobile home sites are rented or held out for rent, and may include a trailer park.

Mobile Home Subdivisions: Any area or tract of land where one or more mobile home sites are sold or held out for sale.

Moderate-Income Household: The income limit for a four-person household which does not exceed 120 percent of the median income of Kern County.

Modular Housing: Housing with substantial portions that are factory built and assembled on a lot.

Nonmarket-Rate Households: Those households who are not financially capable of providing adequate housing for themselves without sacrificing other essential needs, usually more than 40 percent of their income.

Objective: A statement of intent or point to be reached, often expressed with respect to time and in measurable terms.

Open Space: A parcel of land or water essentially unimproved, set aside, dedicated, designated or reserved for public or private use or enjoyment, or the use and enjoyment of the owners and occupants of land adjoining or neighboring such open space. Such areas may be improved with only those buildings, structures, streets, and off-street parking that are incidental to the openness of the land.

Overcrowding: A residential unit containing more than 1.01 persons per room.

Planned Unit Development: An area usually with a specified minimum contiguous acreage to be developed as a single entity according to a plan containing one or more residential developments and one or more public, quasi-public or commercial areas.

Policy: A specific statement that serves as a guide to action, implying clear commitment.

Rehabilitation: Repair of a housing unit that in its present condition endangers the health, safety or well being of its occupants and needs repair to meet reasonable standards of housing.

Responsible Agency: The private individual, government agency, nonprofit organization or other entity responsible for developing or defining housing program parameters, and/or for carrying out program requirements.

Site: A parcel of land occupied or to be occupied by a use or a structure.

Sprawl: Growth characterized by low-density development that results in inefficient land use patterns.

Standard: When referring to building condition, older buildings that have been well maintained and new buildings in good condition or in need of minor maintenance.

Subdivision: Any real property shown on the latest adopted County tax role as a unit or as contiguous units, which is divided into five or more parcels for the purpose of sale, lease or financing by any subdivider.

Timeframe: The time during which each specified program should be developed.

Travel Trailer: A vehicle other than a motor vehicle designed for human habitation, used for semi-permanent housing, for carrying persons and property on its own structure, and for being drawn by a motor vehicle.

Very Low-Income Household: A household whose income does not exceed 50 percent of the median household income of Kern County.

Zoning: The division of land into classifications related to their intended use. Categories may include subsets of commercial, industrial, residential and other uses.

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